Clinical Lecture
ON
CHRONIC ARTICULAR DISEASE.

By RICHARD BARWELL, F.R.C.S.,
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GENTLEMEN,—My last lecture on the subject of chronic articular disease[1] concluded with a promise that I would give you some particulars concerning the management of its two principal forms—viz., that arising in the bone and that commencing in the synovial membrane. For both of these forms I recommended some sort of splint which, while permitting free movement of other parts, should obviate all pressure and motion of the diseased joint; above all other sorts of splint, I advocated one which I depicted and described. But it may happen that when the patient first comes to you the disease is already advanced, and may require some further treatment than mere rest; and under such circumstances the value of your having distinguished, by the means already indicated, the bone from the synovial malady becomes manifest.

Let us suppose that a certain portion of bone—for instance, one of the femoral condyles or one side of the tuberosity of the tibia—is enlarged, painful, and particularly sensitive to pressure; that the pain augments at night, and in the more characteristic forms of disease the limb may start violently just as the patient is falling to sleep, and the skin over the tender point of bone may be red—these symptoms indicate that the inner parts of the bone are inflamed, and that the consequent hyperæmia and effusion within the solid case produce very considerable tension; indeed, the last two symptoms show pretty clearly that suppuration is imminent or has already commenced. If this inflammatory tension, with or without suppuration, be allowed to continue, it will relieve itself in some direction, and in the vast majority of cases the inflammatory products tend towards the joint cavity. Now it is not, in my opinion, consistent with the surgeon's duty to stand aside and let such an injurious event occur; he has, indeed, the power to guide the morbid process along a safe course, and the opportunity which such power gives him should not be neglected.

As near as possible to the site of greatest tenderness and swelling he should choose a point whence he can reach the bone without opening the synovial cavity, and here, turning aside a little flap of soft parts, together with the easily detached periosteum, he may, with a small trephine head, make an opening in the bone; or if the subject be so young that the epiphysis is still cartilaginous, he may, with a gouge rotated in the hand, remove a plug of cartilage down to the osseous nucleus. While this is being done he must observe what sort of fluid flows. If it be not pus, he must examine with a stout needle fixed in a handle or in a needle-holder to find any softened or otherwise diseased bone that may enclose an abscess cavity. Pus, when present, should be detected and eliminated. The treatment, however, is quite successful, even though suppuration have not yet occurred. I have often obtained brilliant results by the mere evacuation of serum and of other inflammatory products; for tension within a rigid cavity, such as is the bone-end, very generally results in a necrosis, or in an abscess tracking towards the joint. When therefore, either by the evacuation of pus or otherwise, you have relieved this tension, pass a drainage-tube into the osseous opening, let the part thoroughly drain, and do not allow external healing to take place until the intraosseous inflammation and discharge has subsided. The cavity must become filled up by granulation from the bottom. By this means you may save many a joint that otherwise would be doomed to destruction. But the chief object of this lecture is to direct your attention to the treatment of that sluggish synovial disease which, as I pointed out a month ago, is not tuberculous, but strumous—that is, it tends to slow, persistent heaping-up of embryonic materials; of granulation which may ultimately undergo suppurative fatty caseous, perhaps tuberculous, degeneration. Now, the problem which in each case you must solve is how to check such accumulation, how to cause the absorption of some of this inflammatory material, and conversion of the rest into fibrous tissue. Let us consider the management of like material in a situation that we can see—as, for instance, lining or filling, perhaps overfilling, an indolent ulcer, which has no tendency to heal. You treat such sluggish and exuberant granulations chiefly by two methods—by pressure and by stimulation—by which means, unless the patient be too aged and debilitated, you may heal the ulcer; in other words, you cause the hitherto intractable granulations to assume formative actions to become a fibrous tissue. Now my practice, which I strongly recommend to you, is to transfer this sort of treatment to joints.

Pressure is a most valuable resource, especially when the tumefaction is neither very large nor very soft it may without stimulation bring about the desired result. It may be applied by means of strapping the joint either with resin-plaster or with one of the many medicated plasters, such as the iodide of lead, ammoniacum and mercury plaster, &c. It may be that these preparations are of some value. But you will observe that to effect any good the pressure must be equable as well as persistent, and it is hardly possible, unless the strapping be changed often, that it should be thus continuous. I therefore prefer as a rule, and especially when the swelling is rather soft, to make pressure with a bandage of elastic webbing, which may be removed and replaced daily if necessary with perfect ease, and which keeps up more even compression. Should the swelling be large and soft, mere pressure is rarely sufficient to produce the required consolidation; the granulations must also be stimulated, and this is effected by injecting among them a solution of some slight irritant. A tubular needle, of calibre a little larger than that used for hypodermic injections, and provided with one or two lateral perforations not too near to the base, is introduced at the softest part of the swelling obliquely to the surface, so that without penetrating what joint cavity may still remain, it may traverse a considerable amount of tissue. When it is thought that sufficient fluid has been injected in one locality, the needle may be partially withdrawn without altogether removing it, and passed, of course without any fresh skin puncture, in another direction, and more may be injected. The fluid which I have found most useful, and which never in my hands has produced any but good results, is tincture of iodine, beginning with half a drachm to the ounce of distilled water, and increasing even up to two fluid drachms. The quantity to be injected must depend on the size of the child and the amount of swelling. From one to two drachms are generally sufficient, and this may be repeated in different parts of the swelling every week, or even twice a week. In the meantime pressure by the means above-indicated must be continued. Under the influence of this treatment the soft tissue soon becomes harder and begins to retract, the swelling diminishes—in fact, the sluggish granulation forms itself into fibre tissue. But you must be aware of what this formation into fibre tissue means—namely, that a certain amount of the normally flexible and mobile textures which enclose the joint cavity become stiffened and thickened, encroaching on or occupying more or less that of space, according to the amount of granulation tissue formed previous to your interference. Thus, if the malady have been treated as above so early in the case that only a thin layer of granulation had formed round and in the synovial membrane, only slight thickening will result—such thickening as is quite compatible with very good mobility—which will so increase that by some care and attention a normal state of the joint may be after a time assured. If, on the other hand, the disease has been allowed to go further—if, for instance, the joint cavity be filled, or nearly filled with granulations, which under treatment solidify into fibrous tissue, much more serious impediment to mobility must result; the bones will be conjoined by a more or less dense ligament-like material; there is false ankylosis, and if during the future course of events this tissue ossify bony union or true ankylosis occurs.

Now you will see the advantage of that which I insisted on in a former lecture—viz., placing each joint in a certain advantageous position; for instance, the elbow bent at a right angle, the knee straight, and so on; because not only are such positions those which most readily conduce to cure, but also they are such as cause the limb to be most useful to the patient should ankylosis ensue or be inevitable. I must, however, remind you that we see in this hospital a great number of cases in which a joint has become ankylosed

[1] THE LANCET, Aug. 2nd, 1884.

in a faulty position, sometimes the ankylosis is true, sometimes false, but in either case the patient is unnecessarily placed in a condition of great inconvenience, the limb being sometimes nearly useless, sometimes a positive encumbrance. In my next lecture I shall speak of modes whereby these troubles may be remedied.

A Lecture
ON
CEREBRAL HYPERÆMIA IN CONNEXION WITH TERTIARY SYPHILIS.

Delivered at the Lock Hospital, Edinburgh, July 5th, 1884,

BY P. H. MACLAREN, M.D., F.R.C.S.E.,
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GENTLEMEN,—Primary and secondary syphilis may appear to you a somewhat limited subject for study, but within their boundaries lie some problems the solution of which will send a ray of light through all pathological science. What is the *materies morbi?* How does the morbific change become weakened and ultimately effaced by mercury? These and similar points, at all events, redeem the subjects from the charge of triviality. When your attention, however, is directed to tertiary syphilis, you are confronted with a series of phenomena so vast, so varied, and so important, that the highest cultured medical intellect has the fullest scope for the exercise of its powers. The dyscrasia which the disease has then effected produces results which may permanently disfigure, damage, or even destroy the patient. When you remember that every texture and every organ in the body may be attacked through changes taking place in the all-pervading connective tissue and the minute blood-vessels, you cannot be astonished at the fact that many diseases are closely simulated, and that several may coexist at the same time.

It was a discovery of great clinical interest which was made at the beginning of the present century that syphilis belongs to the exanthemata, is caused by the introduction into the blood of a specific poison, has a period of incubation, is followed by eruptions, and may in certain circumstances terminate naturally and favourably without the intervention of medicine. Like them, also, it may be succeeded by sequelæ. I am not prepared to say that every case of syphilis appropriately treated for a sufficient length of time will escape these formidable consequences, but from my own experience in these wards I can most positively assert that every case of tertiary syphilis which I have seen has not had specific treatment, or only for a very short time. After inoculation in a previously healthy person primary and secondary syphilis are certain and inevitable—tertiary syphilis is uncertain and occasional. But the consensus of opinion of the great authorities on this subject bears out the statement that mercurial treatment, wisely administered, minimises the risks of tertiary disease, and, conversely, that over-indulgence in alcohol by a person who has neglected the earlier phases of the disease greatly increases the chances of tertiary symptoms appearing. You are aware that the division of the subject is arbitrary, and adopted chiefly for clinical purposes.

The first two forms begin and end within a circumscribed period, with slight deviations; the last never appears until after an interval during which all secondary symptoms have ceased, usually not before the fifth year after infection. But if this be accepted as the normal period for the accession of tertiary symptoms, you must be prepared to meet with the widest variations. You have seen in these wards examples where tertiary symptoms occurred as early as the end of the second year, apparently following on without the least hiatus, and others where ten, fifteen, twenty, and even thirty years had passed before the disease reappeared in its most troublesome and most malign form. Great changes are noticeable in the quality of syphilis in the later stages. It is now no longer transmissible, its manifestations are non-symmetrical, and, instead of tending to spontaneous cure, become more permanent, and show a decided liability to recur indefinitely. Mercury has little influence over them, while iodine, on the other hand, is all powerful. When it declares itself, it does so either by a hyperæmia which is promptly followed by suppuration and ulceration, or by the deposit of a neoplasm called a gumma, which is endowed with only a moderate amount of vitality.

To-day I wish to call your attention to an example of the first form in a situation of vital importance.

Mabel L——, a girl of twenty-three years of age, contracted syphilis fully four years previous to admission into the venereal wards of the Royal Infirmary. She consulted me in April last regarding a subperiosteal abscess on either side of the lower jaw. These had opened spontaneously into the cellular tissue of the neck, causing an acute and extensive cellulitis. An incision in each submaxillary region, followed by efficient drainage, speedily effected a cure. About the middle of June she was brought to Ward 6, suffering from a severe attack of alcoholism, and when partially recovered was found to be the subject of an ano-rectal syphiloma, and remitted to Ward 20. On admission the patient lay with her back to the light in a restless torpid condition, from which she could be roused when addressed loudly, and would answer questions monosyllabically, but she never slept. She complained of pain over the left skull vertex, which was not, however, increased by tapping. She suffered from constant nausea, sickness, and slight diarrhœa. Her pulse and temperature were normal. Milk diet and an acid stomachic were ordered, and the patient was subjected for two days to the closest possible observation. During that time the symptoms remained pretty much as before, except that the temperature showed extraordinary oscillations, ranging between 101° and 105·4°; pulse 100. Five grains of quinine were administered every four hours, and an icebag applied to her head, from which the hair had been cropped close. The following day (June 20th), after three doses, the temperature became slightly subnormal, and ranged between 96° and 97·4°; pulse 92. Sickness somewhat less. Quinine stopped and icebag removed.—June 21st: Torpor and general condition *in statu quo*. Slight twitchings of both arms were observed. Speech more imperfect and laboured. Pupils widely dilated.—22nd: Twitchings during this and the two following days gradually developed into clonic spasms of both arms, which were almost continuous, and were specially marked upon the right side. The face became somewhat turgid-looking, and twitchings of the masticatory muscles were frequently observed. During this period the pulse and temperature were slightly above normal. Patient was now ordered ten grains of iodide of potash thrice daily.—25th: Throughout the next six days the symptoms modified but slightly. The pulse and temperature although showing a tendency to oscillate became more approximated to the normal. Towards the end of this period the movements of the arms were if anything less marked. Twitchings of both eyelids were however observed, and some nystagmus.—July 1st: Patient now appeared more intelligent. Heard and answered questions in a manner which showed that she was still suffering from ataxic aphasia. She still complained of pain over the left skull vertex. Spasms very marked but absent during sleep. Right arm specially affected. In addition to the clonic spasms of the lower jaw muscles, there were almost continuous shakings of the head, which, however, like the other abnormal movements, were most marked when the patient was excited under examination. Both arms showed slight paresis. Incontinence of urine was present. Ankle clonus was made out by Dr. James's method on both sides, specially the right. Pulse 90 to 100 and irregular. Temperature about 100° generally. Sickness and anorexia troublesome, and patient for some days sustained by nutrient enemata. Since that time up to the present date (July 5th) the patient has improved slightly in general health, the sickness is nearly gone, and she can take milk diet, although with some difficulty. The ankle clonus cannot be made out. The movements of the arms are less pronounced, and those of the jaw muscles and muscles of the eyelids have nearly disappeared. Occasionally, indeed, and especially when the patient is not excited, all the clonic spasms are absent. The turgidity of the face is much less. Temperature and pulse normal, although the latter is somewhat irregular. One symptom which caused her great annoyance in the earlier days of her present attack—viz., insomnia at night—has very much abated, and she now sleeps fairly well.

Two days ago, at my request, Dr. Argyll Robertson made an examination of her eyes, and reported as follows:—"Disc hyperæmic; outline dim; retinal veins much congested and slightly tortuous; rest of fundus normal. This condition existed in both eyes, but was specially marked in the left."

Such, gentlemen, is a brief clinical summary of the case at present under our observation. Let us endeavour now to classify the various symptoms, to localise the lesion, and indicate its probable nature. The whole train of symptoms point in one direction, and that is the direction of cerebral hyperæmia. It must be remembered that the prodromata were masked in those of alcoholism, otherwise the intense headache, the vomiting, frequent and not associated with the ingestion of food, the intolerance of light, the mental disturbance, as evinced by confused ideation and illusions, the marked somnolism, approaching stupor, the condition of the pupils, the weak and incoördinate motor power, the jactitations of the arms, and trembling of eyelids—these features, taken collectively, furnish us with an almost perfect clinical picture. The sudden and marked oscillations of temperature, the varying intensity of the clonic spasms of the arms, the occasional and slight ankle clonus, and exaggeration of patellar reflex point in the direction of hyperæmia rather than that of actual infiltration. The intense ophthalmic congestion also favours this view.

The next point which must occupy our attention in the consideration of this case is the extent and locality of this congestion. Is this turgidity general, or is it more marked in certain areas? After a careful investigation of the various symptoms it must be admitted that both sides of the brain are congested, but that undoubtedly the left brain is that most affected. It is upon this side that the headache is most marked and the ophthalmic congestion greater. The fact that the clonic spasms of the right arm were more pronounced than those of the left is an additional evidence in support of this diagnosis. It should be particularly noted that the headache is not increased by tapping over the focus of intensity; a conclusive sign that the dura mater is only slightly involved, if at all. The pain is chiefly limited to the postero-frontal and the antero-parietal regions. We have, therefore, evidently a commencing meningitis, or at least congestion specially marked in the pia mater and superficial layers of the cortex cerebri. This as shown above is most pronounced in a limited area upon the left side of the brain. Before indicating the lines on which the treatment of this interesting case is based, let me for a little direct your attention to the condition of the patient's speech. She is suffering from ataxic aphasia—i.e., an aphasia not characterised by amnesia or loss of memory, but by the loss or impairment of coördinating power over the muscles necessary for the production of speech. When she is asked a question you observe that she answers it, but her articulation is confused and indistinct—in fact, incoördinate. The capability of appreciating with gradually increasing accuracy the site of cerebral lesions has been much enhanced of late years by the work of physiologists and pathologists.

With the aid already afforded them, it is now the duty of clinicians to endeavour to increase this knowledge. The almost speculative presumption of Gall, that the nervous centre for speech is situated in that part of the brain resting on the posterior half of the roof of the orbit, was greatly strengthened by the pathological researches of Broca, who in 1861 affirmed that the second and third convolutions of the left frontal lobe of the brain must be perfect for the production of articulate speech. Since then Ferrier and others have shown by experimental evidence that this nervous centre, as well as that for governing the movements of the upper extremity, are to be found in the area supplied by the middle meningeal artery. This condition of ataxic aphasia therefore only tends to confirm our former opinion that the congestion and irritation were most marked in a limited area of the left cortex.

The prognosis of such a pathological condition of the brain must necessarily be at best a guarded one. The gravity of the lesion, however, is much lessened by the nature of its cause. The fact that it is of syphilitic origin allows us to be much more hopeful than we otherwise could be. In any case the general health of the patient will speedily be affected unless efficient treatment be at once resorted to. If delayed, structural changes soon follow, and insanity, paralysis (from cerebral hæmorrhage), and death may quickly result.

With regard to treatment, the first indication is obviously to remove the cause, if that be possible. In the present case the remoter cause is a diathetic one—viz., syphilis,—and the immediate one, excess of alcohol. The latter has been entirely proscribed, and for the constitutional dyscrasia I have ordered ten grains of iodide of potash to be taken thrice daily. The local measures adopted for diminishing the cerebral or meningeal congestion have been limited to causing the hair to be removed from the head, and the application of the icebag for a very brief period at the beginning of the attack; but, as it caused in a few hours a most depressing action on the heart and temperature, it was soon discarded. Bloodletting by cupping or by arteriotomy of the temporal, or leeching behind the ears, and also all purgatives, have been withheld, because of the patient's very prostrate condition.

The barbarous custom of blistering the scalp is now nearly universally condemned as inefficacious in every form of cerebral irritation, and I have not thought it applicable in the present example. For a successful termination I rely upon rest, careful nursing, simple nourishing food, and the largest doses of iodide of potash the patient can bear. Should amendment fail to follow this treatment, and especially if cerebral pain become localised and more severe, and if, moreover, this pain be increased by tapping, I would assume that the congestion had spread to the dura mater, and would consider it expedient to trephine at an early stage before diffuse suppuration or structural changes had imprinted a fatal aspect on the case.

A few days after the above digest of the case was given severe increasing pain was experienced in the left antero-parietal region, accompanied by a puffy swelling of the scalp at the same part. The pain was intensified by pressure, and the aphasia, sleeplessness, nausea, and sickness were considerably accentuated. The pulse was weak and rapid (120); the temperature only reached 99·4°. The localisation of the pain, the remarkable sensitiveness on pressure, and the œdema of the scalp signalised the extension of the vascular disturbance to the dura mater, and at the same time necessitated consideration of the propriety of direct surgical treatment. The dangers ahead were suppuration, compression, and destruction of a vital organ, and the only efficient alternative seemed to be the chances of relief which trephining might afford. Accordingly, on consultation with my colleague, Dr. John Duncan, I determined to trephine at a point two inches and a half above the anterior margin of the ear in the area of the two anterior convolutions of the brain. The patient was accordingly chloroformed, and a circle of dense sclerosed bone removed, disclosing a dark venous congestion of the dura mater, which was firmly adherent to the surrounding bone, and seemed to be separated from the brain by fluid to the extent of one-sixth of an inch. A puncture was accordingly made, but only serous discharge escaped. The wound was dressed with protective and carbolate of glycerine, covered by a flat piece of sponge and absorbent wadding. The immediate results of the operation were pronounced improvement in the power of articulation and, coincidently, complete and permanent relief from pain. Quiet, refreshing sleep was soon obtained; and when the nausea ceased, the patient was able to eat a more mixed dietary than she had been capable of doing throughout the whole previous course of her illness. The clonic spasms were the last symptoms to amend, and did not entirely disappear until Sept. 16th. The wound healed promptly and the bony circle removed was almost entirely regenerated. The patient is now regaining flesh and strength, is out of bed for part of the day, reads almost continuously, and speaks sentences intelligently with a *staccato* pronunciation. With this exception the nervous system is absolutely normal.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—A meeting of this Association was held at Hull on the 24th ult. After visiting several places of interest in the town, and being entertained at luncheon by the Mayor, an address was delivered by Mr. S. W. North, the president of the Association, and a paper read by Dr. Mason on "The Sanitary Condition of Hull," in which the author gave it as his opinion that Hull was never in such a good sanitary condition as at the present time. A discussion followed, in which Dr. Hime (Bradford), Dr. Hardwick (Rotherham), Dr. Wilson (Doncaster), and other gentlemen took part. Subsequently a paper was read by Dr. R. Bruce Low, of Helmsley, on "Rural Sanitation."

SYPHILITIC AFFECTION OF CEREBRAL NERVES;

WITH OBSERVATIONS.

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CASE 1.—A gentleman came under my observation on July 17th last, who had had fever in India, followed by loss of power in the right leg, in 1881. From this he completely recovered. In October, 1883, he contracted syphilis, and secondary symptoms appeared in November following. When I first saw him his hearing was impaired, and he had constant singing in the head. The whole of the muscles supplied by the portio dura of the seventh nerve were paralysed on both sides. This had produced a very peculiar expression of countenance: the lower lip had fallen; the food lodged between the cheek and the teeth; he was unable to close his eyes; he never smiled; and when talking he artificially supported his lower lip with his finger, but even then his articulation was very peculiar; sensation of the skin of the face was perfect. He commenced a course of calomel baths on July 17th, and was directed to take a pint of the simple decoction of sarsaparilla (L.P.) daily. On Aug. 12th his hearing had improved, and he could bring his lips together and nearly close his eyes. On the 25th he had regained the motion on the left side of his face, some singing in the ears still remained, and, as he said, "the food still sticks a little in the jaw." During my absence from town this gentleman wrote to me, saying that, at the urgent solicitations of friends, he had been induced to place himself under the care of a "specialist for the nerves," so that he might be treated in the country.

The simultaneous affection of the auditory nerves and nerves of motion clearly point to the origin of the seventh pair as the seat of the diseased action in this case. The pathological condition is as clearly demonstrated as in Sir Charles Bell's experiments. In fact, the conclusions are, if anything, more satisfactory, as the patient could describe his symptoms. In Sir Charles Bell's first experiments he was, no doubt, led to a wrong conclusion. On dividing the branches of the fifth nerve in a donkey he observed that the lower lip dropped, and he then concluded that the fifth nerve was a nerve of motion. This error was subsequently corrected, and it was satisfactorily shown that upon the division of the branches of the fifth nerve in an animal the lower lip fell and the food escaped out of its mouth, because the regulating power, the power of feeling, was gone. In Sir Charles Bell's first essay, published in the Philosophical Transactions for 1821, he represents the seventh nerve as controlling the instinctive actions, but not the voluntary actions, of the face. In support of this theory Sir Charles Bell observed that after dividing the seventh nerve on one side the animal still continued using its lips in taking food. The motor nervous influence was withdrawn from one side only of the orbicularis oris, but not from the other. When the seventh nerve was divided on both sides the muscles of the cheeks, the muscles of the lips, as well as of the nostrils, were completely paralysed.[1]

CASE 2.—A married gentleman had syphilis some years ago, for which he appears to have been imperfectly treated. After the secondary symptoms had subsided, the parietal bone on the left side became enlarged to a considerable extent. There was some loss of power in the right leg; this was occasionally better and occasionally worse. After the lapse of many months he had a fit and became unconscious, and there was some loss of power in the right arm. His memory at the same time suffered. The point of interest in this case was that for many months the power of adjusting the focus of the *left* eye was impaired. This was tested on several occasions and at long intervals, always with the same result. He saw well at a distance with the right eye, but was ordinarily short-sighted with the left. By an effort of the will and after a few seconds he could focus the left eye to the same distance as the right, and see as well with one as with the other. On looking along a narrow ruler with both eyes the extremities of the ruler appeared to diverge, "so as to make a very closely formed X." There was nothing the matter with the eye itself, nor was there the least indication of any branches of the sympathetic being affected. The change of focus was produced entirely by a voluntary effort. The ordinary motions of the eye were perfect.

The very interesting question then arises, Upon what condition did the imperfect adaptation of the eye to vision at different distances in this case depend? Since Sir Wm. Bowman made the discovery of the mode in which the eyes are adapted to vision at different distances by a mechanism within the eye itself, little attention appears to have been given to the influence of the external muscles of the eye in producing the same effect. This subject, however, occupied the attention of former physiologists. The fact that the eye is naturally flaccid, and liable to different degrees of tension, indicates that by slight pressure its diameter may be altered. Extreme tension, which prevents any sense of fluctuation, indicates very serious disease. Short-sighted persons are constantly in the habit of half-closing the eyelids so as to make slight pressure on the anterior surface of the eye in looking at distant objects. The antero-posterior diameter of the eye is thus slightly shortened. The action of the external muscles on the eyeball might be called the coarse adjustment of the eye in contradistinction to the fine adjustment by the mechanism within the eye itself. The antero-posterior diameter of the eye may be lengthened as well as shortened. Dr. Hoeack[2] says that external pressure is capable of altering the focal length of the eye. With a speculum he made pressure upon his eye while directing attention to an object twenty yards distant, and saw it distinctly. Endeavouring to look beyond, everything appeared confused. Upon increasing the pressure considerably he was enabled to read a book distinctly held at a distance of two inches from the eye, although in the natural state of the eye he could distinguish neither lines nor letters. This experiment may easily be repeated in a very rough way. If a book be placed before the eyes so close that the type can no longer be distinguished, and pressure be made through the upper eyelid deep into the orbit, the type will become more distinct. In all animals, birds, and fish the muscles which in man are called oblique are really transverse. The superior in all has its special nerve, the fourth; while the external rectus in like manner is supplied almost exclusively by the sixth. Sir Charles Bell has shown that with regard to opposing muscles when one acts the other relaxes, or loses its tone, so that they act in concert although not supplied by the same nerve.

Now, we have in the eye the external and internal rectus, which taken together have a double supply of motive nervous power, the one for the ordinary motions of the eye; the other to regulate the degree of divergence from the usual axis of vision.[3] In like manner the two oblique or transverse muscles taken together having a double nervous motor supply must have a double function. The first, that of rolling the eye so as to enable it to follow a revolving object sufficiently long to produce distinct vision; the other has not been generally acknowledged. Considering the disposition of the oblique or transverse muscles in all classes of animals, the action must be (when they act together) to compress the eye laterally and then slightly to alter its antero-posterior diameter. In dissecting the eyes of animals I have found a thick cushion of fat on the inner side of the eye. This, during the action of the oblique or transverse muscles, would afford a slight resistance and compress the inner surface of the eye.

Irritation of a nerve has a natural tendency to increase the susceptibility, and, if long continued, the development of the muscle which it supplies. A familiar instance of this is shown in the case of children who, from some reflex irritation, begin to squint. If the irritation be long continued, the strabismus becomes permanent. A very remarkable case occurred under my observation some years ago, which illustrates the same point. A young girl had her little finger drawn across the palm of her hand, so as to prevent her closing the other fingers. After a variety of ineffectual treatment, Sir William Fergusson removed the finger.

[1] Vide May's Physiology, p. 174, and Cæsar Hawkins, THE LANCET, March 15th, 1856. A well-marked pathological case such as that above described might have given the same conclusions with regard to the functions of the seventh nerve as those arrived at by so much toil and so many experiments. It is curious that Sir Charles Bell's first experiments illustrate his own words—that we can seldom rely upon the answers that are extorted from living animals by experiments which go counter to the natural feeling of mankind.

[2] Philosophical Transactions, 1794, Part ii., p. 222.

[3] The influence of the sixth pair of nerves must be of very especial service to animals, such as the hare, that look behind them in running.

Upon dissecting the parts, I found that the adductor minimi digiti was enormously developed. After a time the ring finger was drawn across the hand in the same way.

The conclusions to be drawn from the foregoing observations are—first, that the focal length of the eye may be altered by external pressure; secondly, that the mechanism by which this is usually effected is under the control of the fourth nerve; and, thirdly, that prolonged irritation of that nerve, direct or reflex, and of its corresponding muscle produced the comparatively and permanent short-sighted condition of the left eye in the last recorded case.

Savile-row, W.

ON THE

NERVOUS OR MUSCULAR ORIGIN OF CERTAIN SPASTIC CONDITIONS OF THE VOLUNTARY MUSCLES.

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ASSISTANT PHYSICIAN TO THE ROYAL FREE HOSPITAL.

Of late years the method of pathology has been, and is still, becoming more and more experimental. The like is true of therapeutics, experimental pharmacology becoming daily more recognised as an important means of study. Experimental pharmacology is, however, able to do more than teach us in therapeutics, it is able also to render important services to pathology itself. The following paper is offered as a pharmacological contribution towards experimental pathology.

In experimenting with drugs a striking fact is everywhere apparent—viz., that we may reproduce the facsimiles of disease in the laboratory. We may illustrate this statement sufficiently by examples taken from two important genera of disease—e.g., if from that kind of morbid action which manifests itself in the shape of over-action of the muscular apparatus—i.e., spasm,—if from this we select tetanus as an example, we can at once put against it as pharmacological counterpart the effect on the organism of strychnine in toxic dose. Still better examples do we get from that kind of morbid action which manifests itself in the shape of under-action of the muscular apparatus, to which we apply the name paralysis. Pathology has taught us concerning this form of disease that it may be of cerebral, of spinal, of peripheral origin; and pharmacology enforces this teaching by presenting us, as the result of drug action, with each of the above varieties of palsy. Thus the group of the anæsthetics, including chloroform, ether, nitrous oxide, may probably be considered as of value chiefly in that its members abolish the functions of the cerebral cortex, motor and sensory (the sensory effect is in excess of the needful here). Then to illustrate by drug action the second group, that of the palsies of spinal origin, we may take physostigma, the action of which is paralysant by depressing the functions of the cord; lastly, to illustrate the third group we may take curare, this drug, as is well known, effecting paralysis by abolishing the functions of the motor nerve endings. It may be said that we have not pushed our examination very deeply and have not attempted to decide, in the case of physostigmine action, whether the paralysis is the result of action on the motor or on the sensory areas of the cord; but this was not the problem before us. We had simply to present, as the result of drug action, a paralysis of spinal origin; the further analysis is not called for.

These few examples will suffice to show how much pharmacology may aid us in the study of disease, since, enabling us as it does to actually produce disease, to multiply its causes, it thereby enables us, by a careful comparison of these causes, to separate the essential from the non-essential, and so to arrive more nearly at a just appreciation. This is the object we have in view in the present paper—viz., to compare certain effects, the result of drug action, with certain other effects (symptoms) the result of disease. We shall begin by first describing the real thing and then proceed to its simulacrum.

There has long been known as an occasional symptom in certain nervous disorders a condition of the muscles marked by rigidity. Thus in cases of cerebral lesion—e.g., apoplexy,—we are familiar with the so-called early rigidity of the paralysed parts, probably an irritative effect, and also with the rigidity which supervenes more remotely, and is hence known as late rigidity; this latter is probably significant of cord implication, the result of a descending degeneration. Then in various primary diseased conditions of the spinal cord we may meet with this rigidity of the muscles; thus in lateral sclerosis of the cord, likewise, and probably in virtue of the same, in disseminated sclerosis. In the so-called spastic paraplegia of infants we again meet with the same symptom; in this case it may be observed that the pathology is still obscure, and that it is uncertain whether a cerebral or a spinal morbid state underlies the symptom.[1] Lastly, we have in what we term cramp, or cramps, tonic spasm of certain portions of the muscular system, the simple forms of which we are in the habit of regarding as local affections.

In all and each of these cases the question arises, What share are we to attribute to the muscles themselves—what to the nervous system? In how far is the pathology myopathic or neuropathic? This question is none the less pertinent that we have just seen the symptom we are considering in association with disease of the cerebrum and of the spinal cord, for there still remains to determine in how far cause, in how far coincidence is before us.[2]

A very valuable aid towards answering the above question on clinical grounds has been gained of late years in the appearance of a disease which has been named Thomsen's disease, though most accurately described before Thomsen by Leyden. The literature on the subject of this disease is chiefly German, though more recently a very valuable article on the same has been contributed by Messrs. Ballet and Marie.[3] Amongst German literature the article by Bernhardt[4] is very complete, and we shall follow chiefly in his lines in our description. To bring out the characteristic features of the affection it will be perhaps best to take an imaginary case and endow it with the several symptoms which have been observed in the cases hitherto recorded.

The patient we will suppose to be a man[5] in early adult years. His complaint is simply and solely of muscular stiffness—nothing else. His appearance is that of health, and it will be found on questioning him on this point that there is nothing manifestly wrong. His past will likewise very possibly show a clean bill of health, with the exception of the affection of which he now complains. As to this his memory will probably carry him back to early childhood. This dating back of the disease to early childhood comes out very abundantly, and is an important feature in the complaint. In one of the three cases published by Seeligmüller this history did not obtain, the patient stating that the affection had appeared suddenly, some four or five years previously, as a stiffness affecting one leg, the left; and that subsequently the other limbs had become implicated. Seeligmüller[6] rises to the occasion, and thinks that the patient had previously suffered from the complaint, but had not noticed it! Be this as it may, the recognition of the disease at a very early date remains a generally observed fact. Hence for most authors the affection is congenital.[7] Passing to the patient's family history, we may very possibly find that the mother or the father has suffered in the same direction, or, in the absence of such, that a brother or sister is similarly troubled. So marked a family history as in the case of Dr. Thomsen, in which in three generations at least we trace the complaint, we shall scarcely look for. The evidence then obtainable from the family history will give prominence to heredity. We have thus traced back the complaint into the life of the patient himself and into that of his family. What, now, is this complaint more definitely? It is that in the performance of certain voluntary movements the patient finds himself hampered. Thus, should the patient flex vigorously his

[1] Leyden, discussing this question of muscular rigidity, states that it occurs not infrequently in cases of spinal cord disease, and, as he believes, "in association with various diffuse processes of the motor areas."—Klinik der Rückenmarkskrankheiten, 1874, Bd. i., pp. 128, 129, *et seq.*

[2] Under the heading "muscular rigidity" we have not mentioned the rigidity met with in the cataleptic state; yet this also must be included in a sufficient pathology.—Op. cit., p. 128.

[3] Archives de Névrologie, No. 13, Jan. 1883.

[4] Virchow's Archiv, Bd. lxxv. (1879), p. 516.

[5] Recorded cases are too few to yield statistics of any value on the subject of sex.

[6] Gerhardt, Handbuch der Kinderkrankheiten, Bd. v., Erste Abth, 2te Hälfte, p. 175.

[7] Thomsen has observed the affection in his own family, even in the cradle, Archiv. f. Psychiatrie u. Nervenkrankheiten, Bd. vi. (1876), p. 702.

arm at the elbow he may find for a few seconds that he is unable to extend it again. Should he perform full vigorous flexion of the fingers on the palm, as in grasping the hand, he may find the same difficulty, which trouble is also shared by his friend, who may, as one of the authors tells us, have literally to free his hand as from a vice. Clearly the affection is likely to lead to embarrassing situations, and some of the recorded facts are decidedly comic. We have described the arms as affected. We shall almost certainly learn from the patient that the lower limbs suffer similarly, and, indeed, in a higher degree than the arms, the patient being seized with the stiffness in the act of rising from a sitting posture, in the act of mounting his horse,[8] in the first movements of walking. This leads up to the very important fact we must record—viz., that this peculiar stiffness is especially observed *at the commencement of volitional movements;* indeed, as the movement is repeated the stiffness wears off, and may completely disappear, the patient then being as nimble in his movements as the rest of the world.[9] Along with this stiffness we shall learn from the patient that there is associated a peculiar sensation, very apparent to him, but rarely amounting to pain, and therefore very different from the sensation accompanying cramp proper. This is appreciated best by observing that the patient does not come to you for the pain, but almost solely on account of his unmanageable muscles.

We have mentioned the muscles of the lower and of the upper limbs; may others suffer in this affection? Yes. In our conversation with the patient we may possibly have noticed that an unusual movement of the muscles of expression has been slow to resolve itself; this has become yet more evident on asking the patient to voluntarily contort his face. Of the transitory Medusa effect following such contortion the patient is himself conscious as a stiffness of the face muscles. Another thing may have struck us—viz., a slowness, an awkwardness in the patient's speech which, on the theory of a participation of the tongue muscles in the general muscular affection, is readily accounted for. Finally, we may have observed that the movements of the eyeballs are not quite free, and the patient will tell you as much. Thus he finds himself unable at times to turn his eyes suddenly in a given direction, or if the movement obtains it does so haltingly. Each one of the points just enumerated finds exemplification in Leyden's case;[10] in this, moreover, the affection of the tongue muscles was tested by making the patient protrude his tongue and then telling him to rapidly carry it from one side of the mouth to the other; the result in many cases was temporary fixation in a midway position.

Proceeding in our examination, we shall, on making the patient strip, note unusual muscular development, to the extent even of warranting the term athletic. This muscular development may, as in the case of one of Thomsen's children, be quite out of proportion to the bony framework; yet Thomsen refuses to call the muscles hypertrophic. As Seeligmüller and Bernhardt point out, the question is one of a definition of terms. Of the parts of the body affected, we shall note that the muscular hypertrophy finds accentuation in the lower limbs, and in particular affects the muscles of the thigh and calf—i.e., the hypertrophy is most marked in those muscles which are most liable to the spastic seizures; next, passing to the trunk, we may very likely find the sacro-lumbar muscles on either side of the spine decidedly more massive than is natural; and, associated with this, we may also find present a well-marked lordosis. This was so in Bernhardt's case. Thus far, from inspection, we cannot fail to have been struck by the likeness to pseudo-hypertrophic paralysis; and in Bernhardt's own case this was the *primâ facie* diagnosis. Proceeding upwards, the muscles of the upper extremities will probably be noted to be well-developed, but the term hypertrophy will be less fitting. Visible hypertrophy of the face muscles we shall not observe.

If we now test the muscles we may in the first place discover that even whilst at rest they are of firmer consistence than normal. Thus Seeligmüller describes the muscles in one case as of board-like hardness, in another as stony, in the third as being simply firm. In Bernhardt's own case they are simply described as being firm, and in Ballet and Marie's case the consistence is only doubtfully increased. Increased consistence then will be an occasional but not very characteristic feature of the muscles at rest. When thrown into action, however, the muscles will be observed to harden and to stand out in relief, and to persist in this state during the whole time of the impeded movement.

With this we about conclude the list of positive symptoms, and they may be very quickly summed up as follows. We have an affection of the voluntary muscles marked by the supervention of a spastic state on the act of contraction. This is marked for first volitional acts, but soon wears off with repetition of the act. The muscles generally are affected with this stiffness, though certain ones suffer more than others. The affected muscles are increased in bulk, but doubtfully in consistence.

Further examination reveals a long list of negatives. Thus the muscles tested by the dynamometer reveal nothing in the shape of lack of power, the athletic appearance is not contradicted. The condition of the parts around reveals nothing abnormal, no excess of the panniculus adiposus; the surface of the skin healthy-looking, no marbling; sensation, with one exception (Seeligmüller's), intact; of touch, temperature, pressure, pain, in each case the sense is recorded as normal; in addition the muscular sense is preserved. Electric examination in like manner yields almost negative evidence, for though peculiarities in the mode of reaction are recorded, nothing of the nature of the reaction of degeneration is discoverable. Ballet and Marie's paper is the most detailed on this point. They submitted their patient to a very careful electric examination, the results they summarise thus. *The muscles and nerves are less excitable than normal, but there is no marked deviation from the normal formula.* The slight deviation was that for certain of the muscles the anodic closure contraction was "precocious" as compared with the cathodic; also, another point, that the anodic opening contraction was completely absent. The characteristic effect which, however, comes under the heading of *peculiarities* was the readiness with which the contractions electrically excited became spastic. This of course is simply what we should be prepared for having seen that the same peculiarity marks the effect of stimulation of the muscles through their motor fibres by the will. In the absence of the spastic state Ballet and Marie did not observe anything abnormal in the muscle curve obtained with a Marey's drum. In Leyden's case the electrical reactions are recorded as normal. In Bernhardt's the reaction formula is said to be normal, but we find noted as a peculiarity that short excitation, electric or mechanical, yields a local contraction outlasting considerably the stimulation—i.e., the contraction tends to become tonic. Seeligmüller's experience is of a precisely similar kind. We may take it then that beyond the peculiarity of the persistent contraction nothing noteworthy has been observed electrically.[11] Examination has been pushed yet further. Thus we have two records of microscopical examination of the muscular fibres, one by Ponfick, the patient being one of Thomsen's sons, and the fibres extracted from the biceps muscle. To Ponfick's astonishment nothing faulty was found. The like negative results were obtained by Petrone, an Italian observer.[12]

[8] Ballet and Marie, op. cit.

[9] We shall probably learn from the patient that certain conditions predispose to the development of the spastic state—thus fatigue, prolonged exercise, cold, conditions obviously depressant to the organism.

[10] Op. cit. In Ballet and Marie's case the same trouble with the movements of the eyeballs was observed, as also with the tongue movements. Likewise in a case recorded by Schönfeld.—Virchow u. Hirsch: Jahresbericht, 1884 (Jahrgang, 1883), p. 77.

[11] Möbius, Virchow u. Hirsch (Jahresbericht, 1884, p. 76), records similar results from electrical examination in a case of Thomsen's disease. Schönfeld (op. cit., p. 77) records "no electrical abnormality."

[12] See Ballet and Marie's paper, loc. cit.

(To be concluded.)

FIRE AT SALFORD UNION HOSPITAL.—On the 24th ult. a fire occurred in the padded room of this hospital, in which a lunatic was confined, and which resulted in the death of the unfortunate man. The fire, which was extinguished without difficulty, is supposed to be due to the destructive tendencies of the occupant of the room. It is surmised that he first succeeded in making a hole in the canvas with his finger-nails, and then ripped the material so that he was able to climb up the wall until, reaching the fan-light over the door, he smashed the glass and applied some of the straw padding to the gas jet which was burning outside. The fan-light is fully ten feet from the floor, and it had been thought impossible for anyone to get to it without something to stand upon. At the inquest on the 27th ult. the jury, after some consultation, returned a verdict that death was caused by burns received in the padded room of the hospital, but that there was no evidence to show by what means the fire originated.

CHOLERA.[1]

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CHOLERA is an infectious disease. By infectious diseases are meant those diseases which are caused by the reception from without of specific infective material into healthy bodies, which material acts like a poison. To the list of infectious disorders belong such different maladies as small-pox and intermittent fever. Infective material differs essentially from lifeless chemical poison in being composed of the smallest possible units of living matter which when taken into healthy bodies rapidly increase and multiply under certain conditions and by their life-growth disturb the health of the body. These germs of disease belong to the smallest units of life, to the schizomycetes, which lie on the borderland of the invisible, and which, according to their form, are known as cocci, bacteria, bacilli, vibriones and spirilla, and thirty millions of which, according to Nägeli, hardly weigh one milligramme. Infective material is derived partly from sick individuals, in which case the disease is termed "contagious" and partly from locality (earth), in which it has developed, in which case the resulting disease is termed "miasmatic." It is obvious that when derived from both sources the resulting affection was, and even now is, designated "contagio-miasmatic." I am of opinion that the terms "contagium" and "miasm," which have given rise to much misunderstanding, would best be dispensed with altogether; and that the designation "infective material" (Infectionstoff), which is common to both contagium and miasm, should be divided into entogen and ectogen, according as the material is obtained from the sick body or the locality (soil). According to many, cholera would belong to the entogenous section, and according to others to the ectogenous division. The supporters of the first view might be termed "contagionists"; the supporters of the second "localists." As is always the case in medicine, the conflict of views is important, inasmuch as the measures to be adopted in the healing and prevention of a disease depend on the theoretical conception of it.

All readers know that cholera originated in the East Indies, and most individuals are also aware that the epidemic spread into Europe in the present century (1830). We shall first speak of its age in India, the home of cholera. There the disease appears to have existed at all times; not only at the time of the discovery of the sea passage to India by the Portuguese, but long before, as the oldest Sanskrit writings show. Many hundreds of years before the birth of Christ the disease was accurately described and its epidemics spoken of as attended with *mahâ mârî* (*magna mors*, great death). In these writings the disease appears under widely different names, which are taken from the chief symptoms:—(1) *Vishâ dschikâ*, vomiting and sweating; (2) *alasikâ*, cramps which bring on exhaustion and stiffness; (3) *rilambikâ*, which is perhaps best translated by the term "collapse." Another word which is often used in India is taken from the Mahratta, *mordeshin* or *mordschi*, which has been translated into French as *mort de chien*, but which also means "collapse."

In the seventeenth and eighteenth centuries A.D. there are abundant proofs and descriptions of epidemics of this disease. The disease is best known in Europe under the names of cholera, cholera morbus, Asiatic cholera, since the epidemic of 1817 to 1819, in which the English army under the command of the Marquis of Hastings during a war against the natives was rendered unfit for fighting and almost annihilated. But cholera had never visited Europe till the present century, when in 1830 it appeared in Russia and spread to Poland, where war was prevailing. Since that time, sometimes at longer and sometimes at shorter intervals, cholera has appeared in Europe. The question why cholera remained a thousand years in India before it first began to migrate is one of great interest, but one which cannot be satisfactorily answered. The principal consideration appears to me to be that the event happened at the time when intercommunication in all directions, both by water and land, had become more rapid. The first steamship appeared in the Indian waters at the beginning of the second decade of the present century. By land also intercourse was greatly accelerated. The Russians possibly took cholera from India, Arabia, Afghanistan, or Persia, through couriers and stage coaches. It soon became clear that cholera, the specific cholera germ, was in some way or other propagated along the paths of human intercourse, and it also became evident that unless the germs found a suitable soil within a certain time they did not flourish. Observers soon discovered that cholera was more prone to appear in certain regions and to affect certain localities, whilst it shunned other districts; and, again, that other regions were only visited at intervals of many years. It is also a fact that Asiatic cholera never yet appeared at a place which had not previously been in communication with a region where cholera prevailed; and, further, that the disease from an infected locality never yet passed on to another place if the journey lasted a certain time without interruption. The large intercourse between India and Europe, more particularly England, by means of ships which sailed round the Cape of Good Hope, had never succeeded in carrying cholera from India to England; it was only by the overland route that cholera reached England. Neither had the Cape or Australia ever been visited by cholera. It is possible that in the future the communication may be so much accelerated that cholera may get to these countries. In much the same way South America escaped during the epidemic (1830–1840) in Europe and North America. It was supposed that in South America yellow fever was enough to prevent cholera, or that this disease kept out cholera, until suddenly, in 1854, after a service of fast sailing vessels between Philadelphia and Rio de Janeiro had been established, the chief town in the Brazils experienced a terrible epidemic of cholera. When cholera passes overland it dies out unless it find a suitable soil within a certain time. Rainless deserts are unfavourable to cholera. Caravans which pass from infected localities through deserts have never spread the disease, provided the journey in the desert lasted at least twenty days.

Cholera always requires for its propagation favourable stations on land, and as a rule, if the course of epidemics be traced, a gradual extension in successive years is found to take place in fixed directions. In the east and south-east of Russia, for example, cholera prevailed after it had raged in Persia in 1808; in 1860 eleven, and in 1870 thirty-seven, provinces were affected, and amongst them five districts in Poland. In the year 1871 the epidemic spread into the west, east, and north of Russia, and succeeded in reaching East Prussia, when Königsberg was severely visited, so that from July 24th to November 8th 2012 individuals died there of cholera; whilst in Berlin only 52 and in Potsdam only 71 succumbed. In 1872 the epidemic reached Eastern Hungary, and in the following years reaped rich harvests in Germany. It has rightly been said, therefore, that cholera does not travel quicker than man. Nevertheless, the spring-like mode of progression of cholera is noteworthy: for example, it regularly jumps from Marseilles to Paris, or *vice versâ*, passing over Lyons, the second largest town of France. Or, watching the passage over smaller distances, in 1854 it went from Munich to Augsburg by railway, leaving intact the ten intermediate stations, although several patients alighted and some even died, and, notwithstanding that cholera raged at Augsburg and Lech, it never once sprang over the valley of Lech to the town of Friedberg, which is but a league distant. Or to take a still narrower circle, cholera thrice (1836, 1854, and 1873) invaded Munich, and every time halted in those houses situated on the clay soil in the suburbs.

The capriciousness of cholera may be observed in its relations not only to space but also to time; at one time it infected Prussia and shunned Saxony, while at another it did exactly the reverse. In the year 1849 Berlin experienced its worst epidemic, an epidemic in which Saxony was but slightly affected (488 cases), and Bavaria not more so. In the year 1850, when the cholera in Berlin and its environs had almost subsided, the epidemic raged in Saxony until 1551 deaths occurred, though Bavaria was not involved. In 1854 the matter was altogether different; then Munich and Bavaria had its worst epidemic, at which time the Industrial Exhibition was held at Munich, and the intercourse between Munich and Saxony and the whole of Germany was very active. The cholera did not, however, spread to Saxony. All the fatal cases of cholera in Saxony had taken the disease from Munich. The epidemic did not spread further north; yet the inhabitants

[1] Specially translated for THE LANCET from early proof-sheets furnished by the author.—ED. L.

of Saxony and Prussia had sufficient susceptibility for the disease, as was proved when they went to Munich. It was in the year 1855 that a change occurred; then Bavaria was exempt, and the epidemic devastated Saxony and North Germany. What relation the extension from India by the agency of man may have to conditions of time and space, to local and periodical disposition, has yet to be worked out; but the fact of the existence of relations in time and space is as undeniable as that of cholera itself. The cholera germ alone will not explain everything. We must now inquire into the differences between places which are and those which are not susceptible, and endeavour also to trace out the relations in time which obtain in susceptible places.

No doubt can be entertained that the configuration of the earth has a certain influence. Relatively low-lying sites are very favourable to cholera. Where the surface of the earth has an undulating outline it will be found that districts and individual houses which are situate on the summit of the undulation very frequently have no, or only a very small, disposition to the development of an epidemic of cholera, whilst in the hollow of the undulation under like conditions the opposite holds good. The truth of this statement is seen in single districts where parts or single houses exist on the summit and others lie low.

Another feature which is found in every epidemic is the falling off of the disease in the neighbourhood of and on mountain ranges. The Himalayan mountains, those of Lebanon and the Alps, have always formed the places of refuge for fugitives from cholera. Now and then an epidemic occurs in the mountains; these exceptions will be dealt with later. The immunity, or the slight susceptibility, of mountain ranges for cholera is witnessed in India as plainly as it is in Europe. A familiar example is the complete freedom from cholera of the hill stations along the Himalayas, in which, through frequent changes of troops, the cholera has every chance of being taken up from the plains. In the severe epidemic of 1869 there were only two cases of cholera in nineteen hill stations. A similar experience is met with in narrower areas. For instance, in Munich, 1873-74, the frequency of cholera was widely different in the seven barracks of the garrison. In the low-lying Isar Kaserne (occupied by cuirassiers, heavy cavalry regiment), out of 1000 men there were 40 cases of cholera; in the high-lying Max II. Kaserne (with two field artillery regiments) only 3 cases, and this without there being any difference in the construction of the caserns, the occupation or the diet of the men or the drinking water. Another local factor, which is also very evident, is the nature of the soil. Where the soil is compact, and not, or very slightly, permeable for water and air, the development of cholera is much hindered. Some time ago Jameson, in his description of the epidemics of 1817 and 1819 in India, said, "Cholera does not appear to like a rocky soil." French epidemiologists (Boudée and others) have said the same thing. I studied this point in Bavaria in 1854, and then collected so many facts that I came to the conclusion that cholera requires for its epidemic development a porous soil through which air and water easily percolate, and that a compact soil was decidedly inimical. It will be sufficient to give a couple of illustrations. When the cholera broke out in Munich the inhabitants scattered themselves on the mountains. Many settled in the valleys, where several fell ill and died. The greater part of the town in which the better hotels were situate lies upon compact chalky soil, and the smaller part was built upon alluvial soil. In this part the cholera assumed an epidemic character. In the higher lying districts (Schrödelgasse) the epidemic began in the beginning of August, and in the lower lying areas towards the end of September, whilst the greater part situate on chalk was not affected. Amongst the Jura mountains to the left of the Donau lies a village called Kienberg, which is built on rock. In this village the cholera broke out so fiercely that within a month 30 per cent. of the inhabitants died. When I went there I found many houses emptied, whilst other houses had not had a single case of illness. I then thought that the drinking water was at fault. But the whole village drew water from a single spring at the foot of the slope on which the village was situate. From a study of the soil I found that all the houses built upon porous and rather loamy sand had been attacked, whilst those which lay upon the compact soil of the Jura rocks had escaped. The greater part of Kienberg stands upon a cleft of the mountain which had been filled up by fine soil which had resulted from the wearing down of the higher parts of the mountain (alluvial soil). That some doubt should be thrown on the decision of the commission which had adopted my views on the influence of the natural state of the soil on cholera was not to be wondered at. I spared no pains, however, in going to the Krain and Karst mountains, where cholera apparently was raging on a bare rocky soil, and instead of contradiction I found a further corroboration of my views. The towns lying amongst these mountains were found to suffer from an affection which unquestionably proceeds from the soil—namely, ague. The mountains are freely cleft, and the clefts are filled with porous soil, allowing of the free percolation of water and air, so as to be nothing more than an alluvial soil. Here streams rush down the mountain side, turn off at its base, and run on richer still in water. You may often find there a cleft having the shape of a funnel, filled with porous earth; the nature of the cleft and its contained earth may be determined by sinking a so-called Doline, when the bottom will be found to be solid stone. Through the Adelsberger growth the rapid Poik flows; and on the other side of the mountain in which the grotto is situate the waters of the Poik roll off under the name of the Unze; the Unze again flows off at the base of a mountain, as a navigable river, on the other side of Laibach. As I proceeded from Laibach to Novomsto (Neustadtl), I saw shining in the distance before me and far below the mountain a village which turned out to be Rasderto, where, as I learned from my companion, a schoolmaster, that ague prevailed, and, indeed, I found many sufferers confined to bed from this complaint. Rasderto lies below the sites which the cholera infested. At the base of the rocky hills on which Rasderto is situate there flows a stream which is so powerful that it turns a mill.

In order to study the cholera at Malta I proceeded thither in 1868 at my own expense. Mr. John Simon procured me the necessary introductions. On arriving in the harbour of Valetta I was forcibly struck with the rocky nature of the soil. The rocky hills rose high above the water, and on alighting on shore my feet encountered the resistance of bare rock. I ascended the steps hewn out of the solid rock, by which means I reached the plateau, on which the greater part of the town is built. A promenade, which was also shaped out of the natural rock, led me to my hotel. I now became very desirous for a further study of the place. Mr. Inglott, at that time the chief medical officer of the hospitals in Malta, and Dr. Pisani, a distinguished Maltese physician, rendered me very efficient aid in my researches. They often wondered why I had determined to visit Malta. How often did they say to me when I questioned them on the nature of the soil of this rocky island, "Our rock is not rock in your sense of the term, but it is a sponge which sucks up everything which falls upon it"? Investigation proved that the Maltese rock was as porous as Berlin gravel, and that more than a third of its volume consisted of air-containing pores. It is so soft that it can be cut and sawn like wood. As visitors may purchase wood carvings from Oberammergau and Berchtesgaden, so one can obtain carved work of Maltese stone. Tiles cut from Maltese stone find a ready sale in Italy, where they serve to decorate the floors of rooms, where, owing to their porous nature, they are not so cold to the feet as stone tiles. Maltese tiles are as good as wood without being so inflammable. Moreover, of the same stone vessels are made which English sailors use to filter their drinking water. Turbid water when poured into such vessels filters off as a transparent fluid. It will be readily understood that I now no longer concerned myself as to an explanation when I heard that an epidemic of cholera had broken out at a place which apparently had a compact soil.

Not only does the physical nature, but also the chemical constitution, of the soil have an influence on the occurrence of cholera—to wit, the presence of organic matter and water. The influence of the soil on the development of infectious diseases can only be understood by a study of the organic processes which take place in it. The processes are eventually dependent on the action of the lowest organisms, which require for their growth a certain temperature, so much water, air, and food stuffs. In order to explain the occurrence of cholera on such varied soils as those composed of granite, sand chalk, and shell chalk, we must suppose that the soil contains in its interstices much organic matter and water. Farmers know how useless pure soil is, whereas the luxuriant growth of plants when the ground is manured is well known to all. These observations are applicable to the lowest plants, the bacteria, no less than to grain and vegetables.

The germs of putrefaction and fermentation abound in the free atmosphere, but they only grow and multiply where they find suitable food. The hygienic uses of cleanliness here find their explanation and scientific foundation. The refuse from houses, dissolved or suspended in water, forms an excellent nutritive material for the lowest organisms which are so harmful to us. Emmerich has shown that the purest water after being used to clean the floor of a room contains in a very short space of time abundant germs of disease, so much so that a drop of it injected under the skin of a rabbit or guinea-pig is followed by a fatal result. With this dangerous slop-water it is the custom to charge the earth in and about our dwellings. Since man began to live in towns where drainage was in vogue, diseases dependent on conditions of soil (cholera and typhoid fever) have undergone a striking decrease. Just as a field, when excessively manured, does not always remain good for vegetation unless remanured, so is it also with the uncleanliness of the soil in the neighbourhood of our houses. As soon as we cease to make unclean—to manure—so soon do our towns begin to purify themselves, just as a churchyard after a time becomes purified. In a similar fashion does good drainage act in cleansing our towns, and the necessity of a pure water-supply is thus vindicated. It is in this way that, according to my views, cleanliness acts as a deterrent to cholera. Cholera germs may come, but they cannot fructify under such circumstances. That sites naturally exist which, without human interference, are unfavourable to cholera has already been shown.

Where water entirely fails the organic processes soon come to an end; this is true of the soil of the earth. In rainless deserts the soil is dry except the most superficial layer during the night. In such desert places no organic processes can go on; this is shown not only in the absence of vegetation, but may be proved by an investigation of the nature of the air of the soil ("Grundluft"); this air under ordinary circumstances contains much carbonic acid, which proceeds from the processes of organic life; but where the soil is free from water the air of the soil much more closely resembles that of the atmosphere above it. This fact has been experimentally proved by Prof. von Zittel by a comparison of the free atmosphere with the air of the soil of the Libyan desert. These observations are believed to explain how it is that cholera does not appear on a very dry soil. Just as too much water is bad for certain plants, so is it also for some members of the lowest class of the vegetable kingdom. It is likewise conceivable that the organic processes in the soil on which epidemics of cholera depend may be effectually checked by an excess of subsoil water or by a want of material. Micro-organisms have been divided into two classes: anaerobe and aerobe. If now we have to deal with an organism which requires oxygen for its existence (aerobe), it is not difficult to understand how the excess of water might deprive the soil of the necessary proportion of air. The more the pores were filled with water the less air would be contained in the soil. In heavy clay soils the water drives the air completely out, and thorough desiccation would be required to replace all the air. Klebs and Tommasi-Crudeli have already discovered a micro-organism which flourishes only in a moist soil containing air—the bacillus malariæ.

(*To be continued.*)

ON THE PATHOLOGICAL IMPORTANCE OF FLEXIONS OF THE UTERUS.

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(*Concluded from p. 730.*)

LASTLY, there are some clinical points mentioned by Dr. Hewitt as to which I can only say that my experience is not like his; and leave it to those interested in the subject to observe for themselves and form their own opinions. Dr. Hewitt has no recollection of seeing any case of severe dysmenorrhœa in which the uterus was "in anything approaching a straight condition." Among the 100 nulliparous women whose cases are tabulated in my first paper, I found five whose menstrual pain was so severe as to lay them up, and whose uteri presented no appreciable curve. Vedeler, out of 100 patients who suffered great pain at the menstrual period, found eight in whom the uterus was quite straight. In the twenty-third volume of the Obstetrical Transactions, which contains my paper already referred to, will be found a paper by Godson, describing four cases of severe dysmenorrhœa, with sterility; in one of these it is stated that there was no anteflexion, and in another that there was anteversion. It is not necessary to multiply illustrative quotations, for I have no doubt that anyone who has the opportunity of seeing many cases of dysmenorrhœa, and will pay attention to the shape of the uterus, will soon come to the conclusion that Dr. Hewitt's experience is in this respect quite exceptional.

Dr. Hewitt also regards as erroneous my statement that the cradle pessary will not straighten the uterus. But the only positive assertion that he makes is that the instrument is "of very great assistance in straightening the uterus and relieving dysmenorrhœa." I would ask those interested in the subject to examine carefully either by vaginal and hypogastric or by rectal and hypogastric palpation the shape of the uterus before and after the insertion of a cradle pessary. In the majority of cases they will find no appreciable difference. The position of the organ will be changed, its cervix being pulled forwards, and its body tilted a little back, but its shape will not be altered to any definite extent. A comparison of the measurements of the uterus and those of the cradle pessary will show that it is impossible for the cradle pessary to straighten the uterus by direct upward pressure on the body of the organ.

Another point as to which all that I can say is that my experience and that of others is different from Dr. Hewitt's, is this—that he has never seen retroflexion without symptoms, and only exceptionally without dysmenorrhœa. I submit that this may possibly be because he has only examined patients who came to him for uterine troubles. In my second paper I have mentioned that out of eighty-five cases of retroflexion, the notes of which I examined for the purpose of that paper, I found menstruation painless in twenty-one. There was painful menstruation not relieved by straightening the uterus in fourteen, and relieved without straightening the uterus in eleven—that is, twenty-five cases in which the dysmenorrhœa was proved not to depend upon the retroflexion. In all, forty-six cases out of eighty-five in which retroflexion did not cause dysmenorrhœa.[1] I do not think it needful (although there are many whom I might cite) to quote the statements of others on this subject, because retroflexion is a common condition, and anyone with a sufficiently large clinique can ascertain for himself whether Dr. Hewitt's experience holds good of all cases.

4. *The Effect of Treatment.*—I agree with Dr. Hewitt in thinking that the application in practice of the mechanical theory of uterine pathology is the great test by which it must be judged. We may rely upon it that if it be constantly found that straightening the uterus cures cases which cannot be cured in any other way, then treatment having for its object the straightening of the uterus will continue to be practised, no matter how faulty the explanation of the production and cure of symptoms may seem to be. That a line of treatment of which straightening of the uterus forms a part proves successful in the hands of Dr. Hewitt and others, I do not for a moment question; but it has yet, in my opinion (and I am not alone in thinking so), to be demonstrated that the straightening of the uterus is the essential part of the treatment, the *sine qud non* of benefit. The cases which give the most striking presumptive evidence in favour of the theory are those of retroflexion with congestion. It is a frequent experience that in such cases the introduction of a pessary which raises the uterus into the axis of the pelvic inlet, and thereby necessarily removes the flexion, is followed by rapid disappearance of all the symptoms. Dr. Hewitt alludes to these cases, and to his mind the good that is done comes simply from the unbending of the uterus. The explanation of these cases that appears to me to be the correct one is that the congestion depends upon pressure of the veins in the broad ligament against the utero-sacral ligaments. As this paper is quite long enough already, and as I have elsewhere discussed the matter, I shall not here state the reasons in favour

[1] Dr. Hewitt quotes me incorrectly, as saying that of 138 cases of backward displacement under my care there was dysmenorrhœa more or less severe. I expressly stated that in forty-four of these menstruation was painless. Besides this, Dr. Hewitt has taken no account of the number of cases in which dysmenorrhœa was *not* relieved by straightening the uterus, and was relieved although the flexion persisted.

of my own view, but merely set forth the reasons which make me think that the unbending of the uterus is not the *sine qua non* of success in treatment. First, there are cases in which the same symptoms are present, and these symptoms are relieved by the same treatment—(i.e., the raising of the uterus so that it lies in the axis of the pelvic brim), but there is no flexion, the uterus being retroverted not retroflexed. Secondly, there are cases of retroflexion in which all the symptoms are removed by a pessary which simply pushes up the uterus but does not straighten it. These are cases in which congestion is absent (because when the uterus is congested, it is generally tender, and the presence of a pessary directly upon it cannot be borne), but the flexion in many such is acute. Thirdly, there are cases in which, after cure in the manner described, as Dr. Hewitt would put it, by unbending the uterus, the flexion returns as soon as the pessary is left off, but not the symptoms. These cases are not found unless they are looked for. It has been my custom when I removed a pessary from a patient whom I had treated by causing her to wear it to ask her to come in three months and tell me how she was. Many patients who feel well and think themselves well do not do this; but a few have done so, and in some of these I have found what I have mentioned; the flexion is as acute as ever, but the patient is quite well. On account of his quaint way of putting it, I may quote Fritsch.[2] "One not seldom sees patients who come back months or years after the removal of the pessary, full of gratitude for their cure. We congratulate ourselves on having definitely cured retroflexion, but on examination again we meet the old retroflexion!" In these cases it is clear that the bending of the uterus cannot have been the cause of the symptoms. There are thus a large number of cases of retroflexion in which the success of treatment is not consistent with the view that the flexion is the essential cause of the symptoms; and the cases which are consistent with this view can be otherwise explained.

Dr. Hewitt has written a good deal on the relation of malnutrition to flexion of the uterus. His argument, as I understand it, is this: he sees many patients who are badly nourished, and whose uteri are soft and bent. By diet, regimen, and medicinal treatment he builds up the general health, and at the same time, by positional treatment or by pessaries, he corrects the assumed malposition of the uterus. The result is that the patient gets well, and Dr. Hewitt attributes this benefit to the straightening of the uterus. But it is such a common thing for patients who are badly nourished to recover when they are well-fed and kept under a sanatory regimen, that unless we can separate the effect of the local treatment from that of the general treatment, such cases to my mind prove nothing. Dr. Hewitt says that I repudiate the treatment of dysmenorrhœa by bougies. On the contrary, I think it most efficacious, and frequently use it. But my experience is different from that of Dr. Hewitt, in that I do not find it produce any appreciable permanent alteration in the shape of the uterus. Dr. Hewitt says, "That the bougie treatment does straighten the uterus, and that the straightening is one which lasts for a certain time, is incontestable. How long its effect remains will no doubt vary in different cases." In this I quite agree; but its bearing on the question whether flexion is the cause of pain depends on what the "certain time" is during which the bougie removes flexion. I think it is a few minutes at longest. Even were it indisputable that dilatation with bougies always and permanently diminished the amount of bending, I do not think it would from that alone follow that the flexion was the cause of the menstrual pain. For dilatation will also cure menstrual pain in patients whose uteri are perfectly straight. In cases cured by the same remedy the presumption is, until the contrary has been shown, that the condition removed by the remedy is the same in them all; and the flexion is not a condition present in all.

Dr. Hewitt thinks it unreasonable to deny that the vessels in the uterine wall undergo compression when the uterus is bent. It is possible that there may be compression to a slight degree, but the numerous cases that are met by all who look for them of acute flexion without any symptoms whatever prove that the very slight compression on the one side and tension on the other that uterine flexion may produce does not, when the uterus is otherwise healthy, exert any influence on the circulation through the organ. The proposition that it does so is, so far as I can see, pure theory, put forward to account for certain clinical phenomena, which can be otherwise explained.

If it were possible to base any argument on the results of treatment by stem pessaries, such an argument, I think, would be most cogent. There can be no question that while a patient is wearing a rigid intra-uterine stem the uterus must be straight. Stem pessaries have been familiar to the profession for half a century, and still they have not come to be widely used. In alluding to this in my former paper I said that if these instruments did good they must before this have been generally recognised as instruments of undoubted efficiency. Dr. Hewitt thinks "the stem treatment would be largely employed but for the known liability to danger." He must be aware that whenever this subject comes under discussion at the Obstetrical Society those gentlemen whose names are identified with special forms of this instrument get up and say that they *never* see any bad results. It is idle to argue on this question. What is wanted, is for those who have used this instrument largely to publish *the whole* of their cases so treated, and to publish the result *in every case*, giving the symptoms for the removal of which the treatment was undertaken, the condition during the wearing of the stem, and the state of the patient as to symptoms and shape of uterus some months after leaving off the stem. When we can refer to an exact statement like this instead of to the vague assertions that are now made *pro* and *contra* this instrument, much light will be thrown not only on the effects of stem pessaries, but on the question of flexions generally Till this has been done, all that can be said is that we have no scientific evidence to show either that the intra-uterine stem does good, or what is the amount of risk that attends its use.

I would now, to prevent misconception, state briefly my opinions on the subject.

Anteflexion is one of the natural shapes which the uterus may have. It is present in the majority of nulliparous women. It is present most often in early life, but tends to disappear as the uterus takes on functional activity. For this reason, in cases in which deficient development is associated with imperfect performance of function, anteflexion is especially often found. There is no evidence that the anteflexed condition in itself causes any hindrance to the performance of function. It is possible that anteflexion may produce symptoms, but it has never been proved, and if it be so, it is certain that such cases are exceedingly rare, and we have at present no means of identifying them. In a healthy state of the pelvic organs it is rare for the uterus to be retroflexed, but this occasionally happens, and causes no symptoms. When the supports of the uterus become weakened and prolapse begins, it is common for the uterus, as it sinks, to become retroflexed. Retroflexion is in such cases found accompanied with the usual symptoms of slight prolapsus, which are not modified by it. These cases form the majority of those in which retroflexion, because it is removed by the treatment—viz., the giving of the needed support—which removes the flexion, appears to be the cause of symptoms. But the relief to symptoms follows equally from the treatment whether the flexion is removed or not. The disposition of the musculo-peritoneal bands behind the uterus (utero-sacral ligaments — sometimes called the musculi retractores uteri) is in a few cases such that when the body of the uterus sinks between them, the veins which return the blood from the uterus are pressed upon, the return of blood obstructed, and congestion of the uterus is the result. In such cases striking relief quickly follows the raising of the uterus, so that its veins are no longer pressed on; and this relief is most striking when the uterus is so much raised that it falls into a position of so-called anteversion It is probable that many symptoms have been attributed to flexions which depend simply on the general health of the patient, and would have been cured by the treatment adopted if the shape of the uterus had been quite ignored.

West-street, Finsbury-circus, E.C.

[2] Die Lageveränderungen der Gebärmutter, S. 128.

THE POLLUTION OF THE THAMES.—At a meeting held at Woolwich on the 22nd ult., for the purpose of condemning the state of the river Thames, and suggesting remedies for its improvement, the Right Hon. Lord Forbes, who presided, stated that the A B C system of purification seemed to him to be a perfect solution of the difficulty of dealing with the sewage of large towns, and that there was no reason why the system in operation at Aylesbury should not be applied to London.

TWENTY-FIVE CASES OF ABDOMINAL SECTION.

(SECOND SERIES.)

BY EDWARD MALINS, M.D.,
OBSTETRIC PHYSICIAN TO THE GENERAL HOSPITAL, BIRMINGHAM.

In this list the following conditions are represented :—

Removal of uterus with ovaries for fibroid	1
Removal of ovaries and tubes for fibroid	1
Ovarian cystoma	7
Chronic ovaritis	6
Chronic pelvic peritonitis	4
Dermoid cyst of ovary	1
Pelvic abscess	2
Pyosalpinx	1
Double cyst of broad ligament	1
Exploratory	1

In this series there has been one death only. In a girl, aged seventeen, with chronic pelvic peritonitis, there had been persistent hæmorrhage for seven months. The left ovary and tube were found adherent to the side of the uterus, and the opposite ovary adherent to its tube. Both ovaries and tubes were removed, and the pelvis drained. She did remarkably well until the eleventh day, when she was bright and cheerful. Having eaten a good tea, and while reading, she suddenly screamed and died in a few minutes. At the post-mortem, carefully made by the pathologist, there was no marked structural change, and the conclusion was drawn that death was due to fatty embolism.

The ovarian cystomata varied from thirty-three to eleven pounds in weight. All the patients recovered satisfactorily. One case was complicated with a large fibroid of the uterus. Two cases of pelvic abscess were opened, the pelvis washed out with warm water and drained. One contained sixteen pints of fetid pus. Both did well.

In the six cases of chronic ovaritis the ovaries and tubes were in each instance more or less adherent, and the ovaries generally enlarged—the average weight being 140 grains. In the four cases of chronic pelvic peritonitis the ovaries and tubes were also removed, adherions broken down, and the pelvis washed and drained with success, except in the case above-mentioned.

In the removal of the uterus with ovaries there was a large fibroid which had been the source of much pain and metrorrhagia for eight or nine years; the stump was secured by a serre-nœud and treated with iodoform. The patient made an excellent recovery, and has since reported herself as being in good health. The pyosalpinx had the ovary and tube of the left side intimately adherent, the tube dilated and tortuous, containing two drachms of thick pus; it was separated without bursting and not drained; the opposite ovary and tube were enlarged, thickened, and adherent, and were also removed.

A case of double cyst of the broad ligaments was exceptional in character, being filled with about ten and twelve ounces respectively of dark tar-like fluid; these were shown at a meeting of the Obstetrical Society on October 1st. One explanatory examination is instructive and interesting. A girl, aged nineteen, attended the out-patient department for several months, complaining of severe abdominal pain, worse at the menstrual epochs, and causing pain in micturition and defecation. Nothing abnormal could be found in the rectum or bladder; the uterus and ovarian regions were very sensitive. She became an in-patient for five weeks, and was subjected to a variety of treatment and discharged. Several weeks later her mother came and begged for something more to be done for her as the pain was intense at times. She was readmitted, and the abdomen opened. I examined the ovaries, which were intact, and therefore not removed. Nothing wrong could be found elsewhere in the pelvis; it was washed out and the wound closed. The pain never recurred and the patient got quite well. Some weeks later she returned to say that her health was better than it had ever been, and to express her thanks for the operation.

The majority of the cases were done in the General Hospital under the conditions expressed in the record of the previous series. The amount of success justifies the conclusions then drawn that abdominal sections may be successfully performed in any institution with proper precaution and care.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo nascendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

HOSPITAL FOR SICK CHILDREN.

CASES OF MALFORMATION OF THE EXTERNAL ORGANS OF GENERATION.

(Under the care of Mr. JOHN H. MORGAN.)

CASE 1. *Hypospadias; Left Scrotal Hernia; Absence of Right Testicle.*—C. B—— was the twelfth child of parents whose other children were healthy and well-formed. About ten weeks before his birth the mother had a severe fall. The penis was short, and was bound down on each side and below by short bands of skin. The glans was exposed and the prepuce was normal. There was a depression for the meatus at the end of the glans which was not patent, the opening of the urethra being situated at the base of the penis. The skin of the scrotum was natural, and a testis, followed by a hernia, had descended on the left side. There was no testis in the right half of the scrotum, which consequently appeared smaller than the other. The condition gave the parts a great resemblance to those of a female.

CASE 2. *Deficient Development; Non-descent of Testes.*—A. F——, aged four years. Three elder children, all naturally formed, have died of various complaints. This child appears idiotic, cannot talk, and understands very little. The penis is very small and attenuated. It is placed higher than usual, as if there were some deficiency of the pubic symphysis. The prepuce is long, the scrotum very slightly indicated, the testis on each side having descended into the lower part of the inguinal ring, but not into the scrotum.

CASE 3. *Hypospadias; Hydrocele on Left Side; Non-descent of Right Testicle.*—F. M——, aged one year. No family history of hereditary deformity. The penis is very short, and exhibits the usual condition of hypospadias, the urethral orifice being situate at the base of the frænum. The left testis descends into the scrotum, accompanied by a large hydrocele; the right cannot be felt in the scrotum or inguinal canal.

CASE 4. *Congenital Penile Fistula.*—W. S——, aged three years and a half. No family history of deformity. The boy is healthy and well-made. The meatus is natural, the prepuce long. A probe passed through the meatus issues at an orifice midway along the under surface of the penis, the edges of which are thin, and resemble those of a meatus. From the orifice in the external skin, which corresponds to this opening, a probe will also pass along beneath the skin of the prepuce, so that there is a double deformity, and micturition is performed through both openings.

CASE 5. *Hypospadias; Displacement of Urethral Orifice to Left Side.*—F. P——, aged seven months. This child has an ordinary condition of hypospadias as regards the depression for the meatus, but instead of being situated below, the opening of the urethra is situated at the left side of the penis. The median raphe of the scrotum is continued up into the outer skin of the penis along its lower surface, and the urethral opening is placed on the left side of the corona.

CASE 6. *Absence of Right Scrotum.*—F. C——. This boy has an elder brother who is normally formed. He was born with the following condition of parts. The left half of the scrotum is natural, and the testis is of proper size and in the usual position. There is no sign of any scrotum on the right side, nor is there any evidence of a median raphe. The right testis can be felt beneath the skin which is between the scrotum and the thigh. It is of normal size and movable. There is no hernia.

CASE 7. *Congenital Cyst in Prepuce.*—T. W——, aged two years. When three weeks old, a small spot was noticed on the under surface of the prepuce. It was at first the size of a pin's head, but has continued to grow larger. When seen at the hospital, a small transparent cyst the size of a cherrystone, and containing clear fluid, was found upon the under surface of the prepuce, which

was slightly adherent to the glans. The walls of the cyst were thin, and the margins not hard or sharply defined. It was removed with scissors, and did not recur.

ST. LEONARDS HOSPITAL, SUDBURY, SUFFOLK.

THREE CASES OF FRACTURED PATELLA; ONE TREATED BY BACK SPLINT, THE OTHERS BY WIRE SUTURE; REMARKS.

CASE 1. *Transverse Fracture; Back-splint with Traction; Recovery, with good Movement.* (Under the care of Mr. Lynch.)—J. T——, an engineer, aged forty-four, a temperate man. On December 26th, 1881, in getting over a stile he slipped, reached the ground with his right toe, tried ineffectually to save himself, and struck the ground with his right knee. As he did so the knee "went off like a gun," and the leg became powerless. He was admitted on the 31st, when a transverse fracture was found running through the middle of the patella. The effusion was not excessive, but the separation was very great.

The treatment was by a back-splint, figure-of-eight bandage and pads, and elastic springs on either side. These springs were attached by extension plaster to the thigh, and by their other ends to tapes which buckled under the sole of the foot. They were powerfully stretched before buckling—the patient estimated their pull at about thirty pounds,—and they acted very efficiently in bringing the fragments of the patella nearly into apposition. This treatment was continued for six weeks, after which the limb was cased in a plaster-of-Paris bandage, and the patient was allowed to get about with crutches. He was then discharged from the hospital. At the end of nineteen weeks the bandage was removed, and he returned to work, able to earn his full wages. The stiffness of the limb gradually wore off, but three or four months elapsed before he was able to kneel.

CASE 2. *Transverse Fracture; Fragments United by Wire Suture; Recovery, with good Movement.* (Under the care of Mr. Lynch.)—W. S——, a carter, aged thirty-three, of stout build, and a free liver, jumped off the shaft of a cart on April 25th, 1884. He reached the ground with the left foot first, slipped on a loose stone, and in falling struck the ground with his left knee, which, on rising, he found to be useless. He was admitted in the hospital on April 28th. The left knee then measured two inches in circumference more than the right, and a transverse fracture ran through the centre of the patella, the fragments being one inch apart. It was thought advisable to allow time for the effusion to subside.

On May 5th, eleven days after the accident, there was only half an inch of difference between the size of the knee-joints, and the operation for uniting the fragments was performed according to Professor Lister's instructions. The spray was used, and the wound dressed with gauze and mackintosh in the usual way.

The patient was very sick after the operation; evening temperature 100°, and on the 6th 100·2°. On the 7th, 8th, and 9th it was 99°, both morning and evening; then fell to normal, and so remained. The limb lay in a MacIntyre's splint, and was dressed under spray on the second, fifth, and ninth days after the operation, on the fourteenth day with red lotion. The drainage-tube was withdrawn at the second dressing. On the 26th passive motion was made, and no pain was experienced on bending the knee. On June 2nd, exactly four weeks from the date of the operation, the patient got up and moved about with crutches, but he was not allowed at first to put the foot to the ground. Crutches or sticks were used for two weeks; and in a fortnight afterwards he was discharged, after a residence in the hospital of two months. He began light work six weeks later, and a week afterwards was in full work at harvest. He could kneel in about fourteen days after he left the hospital. The wire uniting the bone causes some pricking sensation when he kneels or walks down an incline. This probably arises from insufficient hammering of the wire to the bone.

CASE 3 *Transverse Fracture; Union of Fragments; Suture; Rapid Recovery.* (Under the care of Mr. Ogier Ward.)—C. H. C——, a labourer, aged sixty, a temperate man, in 1879 was thrown from a horse and broke his left thigh near the knee. In 1881 the same bone was broken in the upper third through a fall from a cart. He quite recovered the use of the limb but there is some shortening. On Aug. 7th, 1884, he fell from a ladder on to his left knee, and found he could not walk. He was admitted into hospital on Aug. 8th.

On Aug. 10th, with the permission of the medical officers, Mr. Ogier Ward performed the operation for bringing the fragments of the patella together. The separation of the fragments, which had previously been about half an inch, became very marked under chloroform. There was much swelling and extravasation of blood, but it had not been thought necessary to wait till the effusion into the knee-joint had subsided spontaneously, for Prof. Lister has pointed out that delay in operating, on account of effusion, is productive of no good result, and the after-progress was certainly greater in this case than in the second of the above cases. On incision a quantity of dark blood escaped, and the broken surfaces were found thickly covered with coagulum. The fracture was transverse at the junction of the upper and middle thirds. The capsular tissues had been torn off the lower fragment, but remained attached above, and hung like a flap between the fractured surfaces, effectually preventing their apposition. There was also an oblique displacement of the upper fragment, which, when the muscles were lax, partly overlapped the lower. This obliquity appeared to be due to the unequal contraction of the extensor muscles, probably in some way connected with the old fractures of the femur. The spray was employed, and after wiring the fragments, the joint was syringed full of carbolic glycerine (1 to 12), and the patella and parts near were freely powdered with iodoform. The dressing consisted of protective, covered by one piece of damped carbolic gauze, with a plentiful supply of salicylic wool outside. The limb was placed on a MacIntyre's splint. Evening temperature 100·2°; pulse 80; no pain or sickness. On the next day the temperature was 99·2°, and the pulse 78. The dressings were changed, and the anterior drainage-tube removed. On the sixth day after the operation the dressings were renewed and the posterior tube discontinued. Two days later red lotion was used. The temperature fell to normal on the fourth day.

On Sept. 1st, twenty-two days after operation, passive motion was begun, and the patient was allowed to get up and use crutches, keeping his foot off the ground at first. On Sept. 18th, six weeks from the date of admission to the hospital, he was discharged, sufficiently cured to walk without a stick, and able to kneel. He was able to resume work on Oct. 6th.

Note.—On Oct. 3rd all three men were present for examination. Case 1. Three years since his accident. The union is remarkably good; there is not more than three-eighths of an inch separation. Except that he cannot flex the knee beyond a right angle, the patient has the perfect use of his limb. Case 2. Five months since the fracture was sustained. Union is of course perfect, as are also all movements of the joint. Case 3. Barely two months have elapsed since the injury; there is a little stiffness in kneeling and in flexing the limb: this is rapidly wearing off. The points of contrast are pretty effectively brought out in the following table:—

—	Confined to bed.	Crutches or sticks.	Further delay in resuming work.	Total time lost.	Could kneel after the accident.
Case 1	6 weeks	19 weeks	2 weeks	27 weeks	9 months
Case 2	4 weeks	2 weeks	7 weeks	13 weeks	6 weeks
Case 3	2 weeks	2 weeks	3 weeks	8 weeks	5 weeks

Remarks by Mr. OGIER WARD.—There are several points of note. 1. The treatment of fractured patella by mechanical methods is tedious and difficult, not only in respect to the time required for success, but in the constant attention which the appliances require, and in the very considerable annoyance which they cause to the patient. By operating with strict antiseptic precautions the patient suffers no pain, he is confined for too short a time to bed to allow of injury to his health, while the labours of the medical man and nurse are very considerably lightened. It is also allowable to feel a well-grounded confidence as to the result, very different from the anxiety experienced from first to last in a case treated by mechanical means. 2. Such union as was obtained in Case 1 is by no means universally found persisting three years after the accident, as by this time a gradual stretching of the fibrous bond of union has very frequently occurred; but no doubt the early treatment in this case was

particularly thorough. I question whether in Case 3 the mechanical mode of treatment would have been successful, considering how the capsule and other tissues were squeezed between the fragments, and I venture to suggest that some such complication may in many cases of ununited fracture of patella cause the fragments to gradually fall apart as time goes on. 3. If we consider the serious loss to a working man and his family represented by twenty-seven weeks of enforced idleness, I think we are fully justified in reducing that time by quite one-half, by undertaking an operation where the results are so satisfactory, provided always we have a just confidence in our mode of treatment. It is so common nowadays to read of cases which become septic "in spite of strict Listerian precautions," that it is no wonder surgeons are not all disciples of Lister. I am sure those who have seen antiseptic surgery as practised in Germany will admit that we in England are, as a rule, very far behind. I can only say that were my own patella fractured I know more German than English surgeons whom I would trust to operate upon me. There is one important detail in the operation which in the above cases gave rise to considerable difficulty. It is not alluded to by Professor Lister, to whom, perhaps, his adroitness renders the matter a trifle. To pass the wire from the external to the fractured surface of the patella is easy enough, but the second threading, from the fractured to the external surface, is difficult, for, on withdrawing, the point of the bradawl the hole is instantly obliterated, and the point of the wire searches blindly for it in the interstices of the broken bone. In addition, unless the separation be great, or the limb be flexed, which is scarcely advisable, there is only a trench about half an inch wide in which to manipulate. I have, therefore, had a trocar and canula made, the former fitted with a bradawl point, on withdrawing which, the cannula will be left projecting upon the fractured surface, and be easily found by the point of the wire. It seems advisable, as a rule, to wire the more difficult fragment first.

COLONIAL HOSPITAL, SAN FERNANDO, TRINIDAD.

IMPERFORATE RECTUM; CURE.

(Under the care of Mr. R. H. E. KNAGGS.)

A MALE infant, five days old, the child of healthy negro parents, was admitted on Sept. 6th, having never passed an evacuation and suffering acutely from abdominal distension. The little finger introduced per anum was arrested about half an inch in by a firm and complete occlusion. Nothing definite could be distinguished beyond, and palpation gave no fluctuation. A fine aspirator needle was passed through the centre of the cul-de-sac in the rectal axis, and on withdrawal was found to contain meconium. A large trocar was now introduced, and a copious flow of offensive meconium followed its removal. The cannula was left *in situ* and retained with a large pad of carbolised tow and a T-bandage. All urgent symptoms were immediately relieved. The tube was removed twenty-four hours after introduction, and the motions soon became more natural. The case proceeded with uninterrupted success, and the little patient was discharged cured six days after admission. The little finger could be passed through the obstruction fairly easily.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Treatment of Unreduced Spontaneous Dorsal Dislocation of the Hip.—Cirsoid Aneurysm of Foot.

THE first ordinary meeting of this Society was held on the 28th ult., Dr. George Johnson, F.R.S., President, in the chair. The President referred to the improvements which had been effected, at considerable cost, in the drainage of the house in which the Society met; also the better lighting, increased space, and the new lavatory, which had been provided.

Mr. WILLIAM ADAMS read a paper on Excision of the Head of the Femur in a case of Unreduced Spontaneous Dorsal Dislocation occurring during Fever. The case was an example of spontaneous dislocation of the head of the femur on the dorsum ilii, occurring during the progress of rheumatic fever in a boy eleven years of age, and as the limb remained in a contracted and useless condition, the head of the femur was excised on March 29th, 1882. This operation had been first performed in a similar case by Dr. H. G. Rawdon, of Liverpool, on July 16th, 1881, and published in the *Liverpool Medico-Chirurgical Journal*, January 2nd, 1882. In Mr. Adams's case the patient was admitted into the Great Northern Hospital on March 4th, 1882. After two unsuccessful attempts at reduction, having previously divided the adductor longus tendon, Mr. Adams excised the head of the femur by making a T-shaped incision with the long arm two inches and a half in length directly over the head and neck of the bone, and the small arm one inch in length, transversely over the head of the bone, which was at once exposed. The head of the femur was uncovered by capsular ligament, and the articular cartilage was in a healthy condition. It was found that the capsular ligament had been ruptured, and the torn margins of the rent passed on either side of, and closely embraced, the neck of the bone. After dividing the margins of the capsular ligament the operator passed his small subcutaneous saw to the neck of the bone, and cut through it a little below the margin of the articular cartilage. The detached head of the femur was then drawn out of its position after some slight adhesions had been cut through. The round ligament preserved its normal connexion with the head of the bone, and was adherent to the articular cartilage, having been divided with the saw a little below the head. The wound progressed favourably without much suppuration, and on June 1st was completely closed. On June 14th the patient was allowed to walk on crutches, and on October 1st without crutches. The limb was perfectly straight, and the movement at the hip-joint was free in all directions. The author observed that in all the cases of spontaneous dislocation which had fallen under his observation the head of the femur had been dislocated on to the dorsum ilii. The cases were arranged in three classes:—1. Dislocation occurring during the progress of fever. 2. Dislocation occurring in cases of paralysis, generally infantile, but occasionally in the adult. 3. Dislocation occurring in the first stage of hip-joint disease without suppuration. Excision of the head of the femur in its simplified form, as above described, the author believed would be found applicable to all these cases unless sufficient freedom of motion be obtained by tenotomy and passive movements. He also thought it might be applicable to some cases of fibrous ankylosis of the hip after disease where the limb remained contracted, as free motion is seldom obtained by simply dividing the neck of the bone. The cases of dislocation of the hip brought before the Society by Mr. Morris were alluded to, and also the case published in St. Thomas's Hospital Reports, by Sir Wm. Mac Cormac, in which the head, neck, and great trochanter were excised in a case of unreduced traumatic dislocation of the hip into the thyroid foramen. The firm adhesions, and in some cases the new bone thrown out in cases of traumatic origin as the result of the inflammation following the injury, distinguished these cases from those of spontaneous dislocation occurring during the progress of fever, or in cases of paralysis which had chiefly fallen under his observation. In reply to Mr. Hulke, Mr. Adams justified the removal of the head of the bone by the results he had obtained; moreover, every other means had failed, and the leg was contracted and perfectly useless.—Mr. HENRY MORRIS also exhibited to the Society the case of the man with unreduced dislocation which had been referred to in the paper read by Mr. Adams.—Mr. ARTHUR E. BARKER referred to a case which was admitted into University College Hospital. The boy had sustained spontaneous dislocation in the third week of typhoid fever, when Mr. Barker first saw him; the hip was very much deformed, and there was a moderate degree of pain. The marked deformity presented all the appearance of a dorsal dislocation. On examination the head was found to be one inch and three-quarters above Nélaton's line. The boy was put under the influence of chloroform, when the ligaments as well as the muscles were found to be greatly contracted. By Bigelow's method the head was got into the acetabulum. After this had been done the limb could not be fully extended, but by diligently persevering in passive movements the powers of progression gradually became almost natural. He thought that in all cases of acute synovitis across the manipulative movements of strong flexion with eversion and circumduction would be able to reduce the disloca-

tion. He questioned whether it was necessary to resort to so severe a procedure as excision in any case. In the majority of instances it was fair to assume that the acetabulum was intact. If reduction could not be effected by Bigelow's method, it would probably be sufficient to incise the capsule, and then reduce the dislocation. It would probably never be necessary to divide the whole of the capsule, and even if this had to be done, the ultimate result could hardly fail to be better than in cases where the head of the bone was excised.—Mr. W. HULKE agreed with the views expressed by Mr. Barker. It should be remembered that the accident was a relatively recent one in Mr. Adams's case. The boy, no doubt, ran a certain amount of risk, and as it was an abscess had formed. He had had several instances of spontaneous dislocation under his care. In one the right hip-joint was affected in the course of rheumatic fever, in this instance he had no difficulty whatever in reducing the dislocation. He admitted that a recurrence of the dislocation might take place. It might be doubted whether the result in Mr. Adams's case was better than if an excision had not been done.—Mr. RICHARD BARWELL had seen several instances of so-called spontaneous dislocation. Reference was made to two cases. One was that of a young lady who had a severe attack of typhoid fever, after recovery from which it was found that the left hip was dislocated. Mr. Barwell saw her first fifteen months after the fever. The method of extension by weight and pulley, and Bigelow's method, did not succeed in reducing the dislocation. Passive movement was persisted in, and three years later the walking powers were good, and there was but half an inch of shortening. A second case, in which considerable movement was obtained, with rather more shortening, was briefly narrated. He agreed with the opinion of Messrs. Hulke and Barker.—Sir WILLIAM MAC CORMAC thought that all surgeons would first attempt to reduce the dislocation in the cases under consideration. His case, mentioned by Mr. Adams, was one which owned a rheumatic origin. The patient was a sailor who had sustained a thyroid dislocation of the hip-joint twenty months before he was first seen. Tenotomy and other means had failed to reduce the dislocation. When the operation of excision was in process of performance the acetabulum was found to be very shallow, and thus the impossibility of reduction was accounted for.—Mr. R. W. PARKER considered the operation performed by Mr. Adams as not altogether justifiable. He related briefly a case of acute necrosis of the tuber ischii in which the inflammation spread to the hip-joint; there was spontaneous dislocation of the head of the femur on to the dorsum ilii. In this instance a good result was obtained by the formation of a false joint. He had seen no case of dislocation associated with infantile palsy, and he could not conceive how the paralysis alone would account for dislocation. In some cases of infantile palsy the capsule becomes stretched and loose, and an apparent dislocation might result. Further, he had never seen an instance of Mr. Adams's class of spontaneous luxation.—Mr. SPENCER WATSON spoke of the severity of the case on which Mr. Adams had operated. He regarded both Dr. Rawdon's and Mr. Adams's cases as of an altogether exceptional nature.—Mr. BOWLBY said that the paper had made no mention of pyæmia as a cause of spontaneous dislocation. In one case of this sort the acetabular cartilage was found to be normal after death. A lad, aged nine years, had been under Mr. Langton's care for spontaneous dislocation. The dislocation was reduced and the limb extended on a long splint, but what the ultimate state would be could not yet be determined.—Mr. HENRY MORRIS said no one could fail to congratulate Mr. Adams on the result which had been obtained. Granted that reduction was impossible, the question arose whether any operation was advisable. He could not help believing that by dint of time and perseverance good results might be obtained. An unreduced dorsal dislocation which resisted all other measures of relief might be treated by subcutaneous osteotomy; by this neat and simple operation we might alter the deformity and correct the angle at which the limb was placed. The surgeon endeavoured to get bony union of the section only at a different angle, so that parallelism of the limb and fair powers of movement should result. Reference was made at some length to a paper published by him in the forty-fifth volume of the Society's Transactions. In cases of paralysis in the adult operation would be out of the question; for such cases might be examples of Charcot's disease. Mr. Stanley had written a paper in the twenty-fourth volume of the Society's Transactions where there was double dislocation of the hip-joint, which was probably a case of Charcot's disease. In instances of traumatic disease, where a considerable degree of fibrous ankylosis obtained, he believed that subcutaneous osteotomy would also prove of value. A case of long-standing disease with very great flexion was related, in which he had excised the head and neck of the bone. It was found that a small sequestrum existed in the head of the bone, which was surrounded by some rarefied osseous tissue. Here the limb was made sufficiently straight to allow of good movements of progression; the man, it must be remembered, was fifty-five years of age, and bore the operation remarkably well.—Dr. RAWDON said it was now three years since the operation was done in his case, and the limping had come on within the last year.—Mr. ADAMS, in reply, agreed that the operation was not one that should be too lightly undertaken. He would not recommend the operation until all manipulative and other measures had failed. The operation was by no means a severe one. A case illustrating dislocation of the joint in the first stage of morbus coxæ was related where treatment by Thomas's splint had been adopted. The paper published in 1841 in the Transactions of the Medical and Chirurgical Society by Mr. Stanley showed that there were three cases in adults; one of these might have been an example of Charcot's disease. Mr. Adams advised not too much delay, because tilting of the pelvis and spinal deformity prevented good results. In the traumatic class of cases the first operation was performed by Mr. Sydney Jones. Excision of the head of the femur was resorted to after failure to reduce the dislocation by other means. The boy afterwards walked, jumped, and joined in all athletic games.

Mr. WALTER EDMUNDS read a paper on a case of Cirsoid Aneurysm on the Dorsum of the Foot, with remarks. The patient was a man aged twenty-nine, who had an aneurysm on the dorsum of the left foot. Pulsation could not be completely arrested by compression of the anterior tibial artery. Esmarch's bandage was applied, but without benefit. The aneurysm was dissected out, seven communicating vessels requiring ligature. The patient recovered. The various methods of treatment were discussed, and digital compression having failed, or being unsuitable, excision was recommended. An abstract of previously published cases of the disease was added.—Mr. W. HULKE had seen the case, and referred to the tortuous condition of the arteries. Pressure on the anterior tibial artery failed to stop the pulsation, but when proximal as well as distal pressure was resorted to pulsation ceased. In a case of aneurysm of the supraorbital branch of the ophthalmic artery he had found that galvanopuncture was very efficacious. He could not but believe that galvano-puncture was a less severe measure than dissecting out the sac in such cases.—Mr. RICHARD BARWELL inquired whether the case were one of true cirsoid aneurysm or one of sacculated aneurysm, with which a good many dilated arteries communicated. Aneurysms on the dorsum of the foot were very difficult to treat, and statistics as collected by him showed how fatal a disease it was.—Mr. EDMUNDS replied that the disease was not true cirsoid aneurysm.

CLINICAL SOCIETY OF LONDON.

Myxœdema.—Dislocation of Patella.—Bromide Eruption.—Nephrectomy for Sarcoma.

AN ordinary meeting of this Society was held on Oct. 24th, Sir Andrew Clark, Bart., President, in the chair. An interesting case recorded by Professor Bruns of Tübingen, bearing on the pathology of myxœdema and cretinism, was related by Dr. Felix Semon.

Dr. JAMES ANDERSON gave a short account of the clinical history of a case of Myxœdema. The patient was an unmarried woman, aged forty. She complained of swelling of the eyelids, which she had noticed to be gradually increasing for the past nine years. The patient was one of a family of nine, none of whom had shown any symptoms resembling hers. The patient's father died in old age; her mother died at fifty-seven, with hæmorrhage from the mouth and vomiting coffee-ground material. There was no history of gout or hæmophilia in the family. Up to the age of twenty the patient lived at home in Liverpool. Thereafter she was for twelve years nurse and maid in a family in Liverpool, and for the last eight years she had held a similar position in a family living in Kendal. She had always had a good home,

with plenty of fresh air and exercise, and freedom from anxiety or exposure. For the first twenty-three years of her life she enjoyed excellent health, when, seventeen years ago, she had two teeth extracted, the bleeding from which lasted twenty-four hours, and was very copious. She said she has never been well since. No marked symptoms, however, were noticed by those around her till twelve years ago. The patient presented the characteristic phases of myxœdema as described by Dr. Ord. The loose, baggy, almost translucent lids, the dry brawny cheeks and thick blue lips, with the swollen, red, expressionless hands, and deliberate speech and volition, make a group of symptoms which only the comparative rarity of the disease can have prevented from earlier recognition, and which, once seen, cannot be forgotten. The heart and lungs are sound, and the digestive system is somewhat defective. The molar teeth have crumbled away bit by bit; the gums are vascular and hypertrophied and bleed freely. The extremities are always cold, and the axillary temperature subnormal. The urine varies much in quantity; the total amount of urea is invariably deficient, only rising to half the normal amount, and frequently being as low as one-fourth; it contains neither sugar nor albumen. She has menstruated regularly from the age of fourteen. The amount has always been copious, but sometimes after the discharge has ceased it commences again, and may last for three weeks, leaving her very exhausted. With the exception of the deliberate speech, thought, and volition, there are only two points to be noted as to her nervous system: the first is the constant recurrence of a nervous restlessness, which she terms "fidgets"; the second is her ocular condition. She is slightly hypermetropic, but with the correcting lenses has perfect vision. Under atropine there is seen to be slight peripheral opacity of the left lens, otherwise the media are normal. In neither eye, however, is the retina normally transparent; a haze exists surrounding the vessels, especially in the neighbourhood of the disc. The appearances differ entirely from those of a past neuritis or retinitis, and, as has been said, do not interfere with perfect vision. Dr. Stephen Mackenzie kindly admitted her under his care at the London Hospital, and to him Dr. Anderson was indebted for detailed observation during her stay there. As regards treatment, the usual tonics seemed to have no effect whatever, either before or after admission. A fortnight after admission she was put upon half-drachm doses of tincture of jaborandi, which she continued till she left the hospital, three weeks later. Of objective improvement there was none, or almost none, but she expressed herself as feeling much better within a few days after commencing the jaborandi, and this subjective improvement was accompanied by a steady increase in the amount of urea excreted, which doubled itself during the period, and was at its maximum on her discharge from the hospital. Dr. Symington of Wolverton has since had her under his care for severe menorrhagia, and he states that she seems in very much the same condition as when she was last seen. The points of interest in the case seem to be (1) the history of commencement from a severe hæmorrhage, combined with the present hæmorrhagic tendency of the patient; (2) the occasional state of nervous restlessness, so apparently incompatible with the general character of the disease; (3) the retinal condition, which was peculiar, whether characteristic of the disease or not; and, lastly (4) the effect of jaborandi on the subjective condition of the patient, and on the amount of urea excreted by her.—Sir ANDREW CLARK inquired as to the state of the vascular system. He had never seen a normal circulation in cases of myxœdema.—Dr. ANDERSON replied that the heart yielded no signs of valvular disease, but its action was weak and the pulse was at times imperceptible at the wrist. In reply to Sir Andrew, he also stated that in his opinion the increase in the daily discharge of urea which accompanied the administration of jaborandi was directly due to that drug and not to an alteration in diet.—Dr. FELIX SEMON referred to an account, which he had given before the Society last session, of the results obtained by Kocher from the removal of the thyroid gland in growing persons. The group of symptoms were stated not to appear when a part of the thyroid gland was left behind or an accessory thyroid gland existed. The fact that the cachexia strumipriva appeared in young individuals of incomplete development required to be supplemented by other facts before the full alliances with myxœdema and cretinism could be made out. Removal of the whole of the gland leads to arrest of the development of the length of the body, whilst the head continues to grow. It was hoped that the investigations of Kocher would throw light on the nature of cretinism and myxœdema, in both of which states the thyroid gland was involved; it was now probable that there were merely changes in degree between these three affections, and that the difference between them depended on the time of life at which the symptoms set in. Atrophy or degeneration of the thyroid gland was probably the cause of all the symptoms of myxœdema. What might be called the missing link in the proof of the causation of myxœdema and its allies had recently been supplied by Herr P. Bruns, Professor of Surgery in Tübingen, and which is published in the *Sammlung Klinischer Vortrage* of Professor Volkmann under the title of "Ueber den gegenwärtigen Stand der Kropfbehandlung." The case was that of a man still living, aged twenty-eight years, who had the thyroid gland completely extirpated eighteen years ago. A record of the operation was published at the time by Dr. Sick of Stuttgart, in the *Württemb. Med. Correspondenzblatt*, 1867, No. 25. Prior to and shortly after the operation the boy was bright and lively, but later on he changed in a remarkable manner. And although he retained the power of mental application and willingness for work, yet he had altered notably also in intellectuality. The man, now aged twenty-eight, has many of the characters of a dwarf and cretin; the conformation of the body is that of a boy, the greatest length being 127 centimetres. Nevertheless, the head is in every respect the size of that of an ordinary man; the facial expression is idiotic, and the features are much swollen, especially about the lips and lower eyelids. The hair of the head is scarce and thin, and there are but few hairs on the pubes, though the genitals are normally developed. Swelling of the tongue, palate, and tonsils exists to some extent. The breath sounds are normal, and the action of the heart is feeble; no enlargement of the spleen could be made out. The faculties of sensation and muscular power are preserved almost intact. Although until recently he was industrious, especially at knitting, yet now even this proof of a limited preservation of intelligence has passed away. The mental disturbances are confined to the exhibition of apathy. The visual and auditory powers are sensibly decreased in acuity. Commenting on this case and the results obtained by Kocher, and also by Schiff on a young cat, Dr. Semon thought there was sufficient evidence to prove the near relation of cachexia strumipriva to myxœdema and cretinism. The question of the exact connexion between absence of the thyroid gland and the groups of symptoms which characterised myxœdema, &c., was also discussed. Dr. Semon believes that atrophy of the thyroid body is at the root of the whole mischief and is the *fons et origo mali*. He thought that there was no evidence to support the view that damage of the branches of the sympathetic in the neck played any considerable part in the causation.—Sir ANDREW CLARK said that it was yet open to discussion whether mere absence of the thyroid gland was the cause of the disease or whether it was the removal of the gland which set up the peculiar group of symptoms.—Dr. HALE WHITE referred to a case, recorded by Dr. Mahomed, of myxœdema which had improved under the use of nitro-glycerine. The patient, however, succumbed later on. In that case the thyroid gland was completely atrophied and none of its proper structure remained; the fibrous tissue was much increased in amount. A nuclear proliferation was detected in the liver, but all the other organs presented no special characters. The cervical sympathetic system was altered, but not more diseased than might be accounted for by the mere presence of infiltration as occurred in the rest of the body. He did not think that the disease was brought about by any direct lesion of the sympathetic system. The nerve cells were blurred and the connective tissue was swollen, did not stain well, and had a sort of sodden appearance.—Dr. W. B. HADDEN said that the presence of hæmorrhage in the history and the occurrence of cataract had been noted in other cases. Dr. Goodhart and he had observed changes in the cervical sympathetic like those described by Dr. Hale White. He could not altogether agree that the changes were purely secondary. The granular appearance of the nerve fibres was noteworthy.—The PRESIDENT said that in not one of the cases which he had seen was menorrhagia absent.—Dr. ANDERSON, in reply, said that after bleeding from the gums many years ago the patient said that her neck became swollen and the speech thick, though these symptoms disappeared a week later. Nevertheless, the same

symptoms set in again nine years later, when the myxœdema definitely began. She had received no benefit from nitroglycerine, and, although jaborandi improved the subjective symptoms, there was no change for the better in the physical state. The modified connective tissue of the retina might be involved like the connective tissue elsewhere, and the slight changes observed might be accounted for by the smallness in amount of the connective tissue.

Dr. C. H. GOLDING BIRD read notes of a case of Congenital Dislocation of the Patella in a girl, aged eleven, who for six months had been troubled with displacement of the patella on to, and afterwards quite outside, the external femoral condyle. On bending the knee or straightening it the patella resumed its normal position with an audible click. There was some pain, but the affection was more disagreeable than painful. She walked well, but with stiffened knee. The displacement was first observed after a fall. The author believed the cause of the displacement to be due to structural shortening of the quadriceps extensor following paralysis of the muscle—probably infantile—and had tried as a rational mode of treatment tenotomy of the ligamentum patellæ; but the only gain was the disappearance of the click, the dislocation occurring as before. He thought the name paralytic dislocation preferable to congenital. His case agreed with the description given by Hueter. The case had been exhibited at the Society early in the year.—Mr. RICKMAN GODLEE referred to a similar case in a girl, aged six years, which he had shown at the Society. The view that the shortening of the extensor muscles was the cause of the dislocation was not concurred in. Mr. Godlee said that his patient complained of no discomfort, although the affected limb was much shortened and wasted.

Dr. CARRINGTON showed a drawing of a case of Skin Eruption due to the administration of Bromide of Potassium. There was no history or appearance of syphilis in either of the parents. An elder child three months old had suffered from impetigo capitis. The patient was born quite healthy, and with trivial exceptions remained so up to about ten months. At that time he began to suffer from convulsions and symptoms which seemed to point to meningitis, and he was treated with an ounce and a half mixture containing one scruple of bromide of potassium, of which one drachm was given every four hours; this was for a time administered every three hours, and the ammonium was for a time substituted for the potassium salt. This treatment was persisted in for about seven weeks. The eruption appeared in the form of minute red papules, which in the course of three or four days attained the size of a penny-piece. The parts affected were the buttocks, legs, thigh, and, to a smaller extent, the scalp and face. When first seen the spots were of variable size, from a pin's head to a penny-piece. The smaller ones were of a bright-crimson colour, and smooth, the largest ones of a dark-brownish hue, circular or elliptical in form, with a sharply defined edge of at least one eighth of an inch in thickness. They were of a spongy texture, without the least trace of fluid contents. The treatment adopted by the practitioner under whose care the child came was half a grain of potassium iodide and one minim of liquor arsenicalis three times a day. In a fortnight there was very great improvement. Some of the spots had disappeared, and were represented only by pinkish discolouration, and the others were much shrunken and nearly level with the skin. No new ones had appeared. The child made an uninterrupted recovery; and when seen two months after all the lesions had disappeared with the exception of two or three on the scalp and face, which took the form of dried up scabs. The eruption was never moist from beginning to end. It was worthy of note that an eruption due to the bromide should disappear under the administration of the iodide of potassium.—Dr. DYCE DUCKWORTH said that the case was somewhat peculiar in that the sebaceous glands were said not to be specially involved. The bromide eruption was a confluent kind of acne, whereas the iodide eruption was a dermatitis in which the sebaceous glands were not specially affected.—Dr. STEPHEN MACKENZIE spoke of a case of bromide eruption in which he had made a microscopical examination of a large number of sections (*vide* THE LANCET, vol. i., 1884, p. 937). The inflammatory changes which existed were shown to be most marked in the vicinity of the hairs and embryonic sebaceous glands. In Dr. Cholmeley's case and in the new Sydenham Society's Atlas the tuberculo-pustular eruption was well seen. The eruption always occurred in children. As regards the diagnosis, it was important to know that the eruption might come out some time after the administration of the drug was begun, and to remember that the disease lasts a much longer time after the disuse of the medicine; the disease may be thus prolonged two or three weeks. The appearance of a large flat-topped corrugated eruption was amply sufficient for diagnosis.—Dr. BARLOW corroborated the statements of the previous speaker as to the prolongation of the disease after the removal of the bromide. It was necessary to insist on this point, for some eminent dermatologists had said that the rash stopped when the offending cause was removed. It was extremely likely that there was an idiosyncrasy with respect to the elimination of iodide and bromide salts from the system. In Dr. Lees' case Dr. Stevenson found bromine in the urine three weeks after the cessation of the administration of the medicine. These salts were, as a rule, rapidly eliminated. Moreover, the skin eruption may be set up by so small a dose as a grain and a half of bromide of ammonium.—Mr. MORRANT BAKER said that the excretion of iodide was generally retarded by advanced disease of the kidneys, as he had witnessed in a remarkable case of iodide eruption.—Dr. DYCE DUCKWORTH corroborated this testimony.—Dr. STEPHEN MACKENZIE thought there might be a tendency to too wide a generalisation. He watched for two or three years a case of Bright's disease in which drugs caused no peculiar manifestation.

Mr. GODLEE read a paper on a case of Nephrectomy in an Infant. The child, a boy aged one year and ten months, was admitted under his care at the North-Eastern Hospital for Children in August, 1883. The tumour was first noticed in June, 1883, and was growing rapidly. It was on the right side, and measured four inches in the long diameter and about two in the short. It was freely movable, and manipulation caused no pain. There were no urinary symptoms. The kidney was removed by the lateral abdominal (Langenbuch's) incision, and the removal was readily accomplished, as there were no adhesions to surrounding structures. The cæcum and the duodenum were the only pieces of bowel exposed. One large vein which ran over the tumour alone required ligature. There was no hæmorrhage of consequence, and the whole operation was concluded in half an hour. The child had no symptoms of any kind after the operation. It ate and slept as well the next day as before, and the temperature rose to 99° only once, the day after the operation. It left the hospital well six days later. It continued well till February, 1884, when recurrence took place in the right iliac fossa and the tumour rapidly increased in size, passing down into the scrotum, and the child died soon after. Mr. Godlee mentioned eight other cases which have been recorded, showing that of them five had died of the immediate result of the operation, two had recovered well but died afterwards of a recurrence, and one was well when last heard of. Notwithstanding the unsatisfactory nature of the results he argued that, seeing how hopeless the condition is if left alone, we should endeavour to remove these tumours in a still earlier stage, at all events until it is proved that even this proceeding is invariably followed by a fatal result. He particularly, however, pleaded against attempting the removal of the very large growths which are not unfrequently met with, showing that they will almost certainly have involved surrounding structures, and that thus while no good can follow the operation an immediately fatal result is probable. The tumour weighed about one pound, and was in structure a mixed sarcoma, most of the cells being roundish or oval, but some spindle-shaped. This is probably the usual composition of these growths, but another class was mentioned in which striped muscular fibres occur. The latter are probably congenital, and often affect both kidneys, and are thus not favourable for surgical interference.—Mr. BARWELL doubted whether the operation for removal of sarcoma of the kidney would ever be justified by its results. Incision on the outer side of the rectus abdominis was probably far better than the lumbar incision, as Langenbuch had said; for there was much less chance of bleeding.—Mr. MEREDITH related the case of a little girl, aged four years, in which a renal sarcoma of rapid growth had taken place. On examination a "bossy" irregularly-shaped tumour was situate in the right side of the abdomen, having all the characters of a renal tumour. After consultation with Sir Spencer Wells extirpation was decided upon. During the operation the capsule gave way; the pedicle was transfixed and tied in two halves; the ureter was secured. There was but little hæmorrhage. Collapse soon passed away, but death followed on the third day. At the autopsy it was

found that both the lungs were studded throughout with new growths, which had yielded no sign of existence during life; the extreme rapidity with which apparently secondary infection might occur was remarked upon. The vena cava was found to be completely occluded by the ligature, but, probably owing to the collateral circulation having been opened up before the operation, this occlusion had given rise to no signs. The ureter was found to be distended with urine to the size of the little finger, and the theory of regurgitation might account for this distension. He thought it would be better to bring the divided end of the ureter out into the abdominal wound in future operations. The tumour turned out to be a round-celled sarcoma; the urine was perfectly normal throughout the course of the case.—Mr. KNOWSLEY THORNTON thought that such cases as Mr. Godlee's ought not to be operated upon, because the fatal results added to the statistical mortality of the operation known as abdominal section. He was firmly convinced that if we could eliminate such unsuitable operations abdominal section might become the most successful operation for nephrectomy. He had performed this operation ten times with uniformly good results.—Mr. A. E. BARKER could not concur with the remarks of Mr. Barwell that the anterior layer of the mesocolon would most likely present itself in the operation for nephrectomy by abdominal section. He referred to a case in which he had used the median incision, and then he came down on the growth with the greatest ease; the external layer of the mesocolon was almost necessarily incised in Langenbuch's operation, but the anterior might possibly present if the median incision were adopted.—Mr. RICKMAN GODLEE, in reply, said that it was not easy to determine the position of the colon; where the tumour was large the bowel was emptied of air, and so palpation only was of service. He thought that Mr. Meredith's case should not have been operated on. In his own case a little clot projected into the vena cava. Mr. Thornton considered that he took a too sanguine view of these cases, but such was not the case. In three cases which he had recently observed it did not seem advisable to interfere surgically. The abdominal section had the advantage in that secondary deposits in the viscera could be felt for during the operation. In his case he allowed the ureter to take care of itself, and this without evil consequences; it was the outer side of the colon that he passed through in getting at the tumour.

Dr. KINGSTON FOWLER exhibited a living specimen of Pigmentation of the Tongue in a man, aged forty, suffering from phthisis.

MEDICAL SOCIETY OF LONDON.

AN ordinary meeting of this Society was held on Monday last, Mr. Arthur E. Durham, F.R.C.S., President, in the chair.

Mr. SPENCER WATSON read a paper on a case of Chronic Hypertrophic Rhinitis. The case was unusual in many respects. A nurse girl, aged twenty-one, had been suffering from nasal discharge, occasionally offensive, for a period of eighteen months before she was first seen. There was obstruction of both nostrils, with all the symptoms of chronic inflammatory disease of the nasal passages. The obstruction was due to excessive hypertrophy of the turbinate bones and their overlying mucous membranes. Several portions of the hypertrophied bone and mucous membrane were removed by operation, and the channels dilated by ivory plugs. At the same time sprays of various kinds were used, and a course of arsenic given internally. The result was very satisfactory; the senses of smell and taste were restored, and the free respiration through the nostrils re-established. The instruments employed and the portions of tissue removed were exhibited, and the patient was present for inspection. The nostrils were seen to be nearly normal in appearance and the passage quite free for respiration.—The PRESIDENT spoke of the importance of the subject, and of the frequent association of chronic hypertrophic rhinitis with mucous polypi, together with the liability of confusing between them.—Dr. GIDEON GARDINER referred to the presence of a discharge having an offensive odour passing down the œsophagus into the stomach. He had employed glycerine of carbolic acid and a powder of starch and iodoform in equal parts as an insufflation.—Mr. WALSHAM thought it was difficult to decide whether the catarrh was caused by the stenosis or *vice versâ*. But he was sure that the hypertrophy kept up the catarrh when the stenosis reached a certain degree. He had removed a part of the inferior turbinate bone with considerable benefit, though the relief was not always permanent. In displacement of the septum nasi which sometimes accompanied the disease the rectification of the septum had done much good. Nitrate of silver on a probe could be employed with much benefit; he had also used chromic acid and iodoform.—Mr. WATSON, in reply, was convinced of the value of chromic acid, which he thought was the best caustic.

Dr. BRAXTON HICKS exhibited an apparatus for Dry-air Disinfection, which is described in another column.—Dr. ROBERT BARNES thought the employment of this apparatus was of immense importance in the lying-in chamber, and for deodorising linen and clothes. He considered that no articles should come back from the laundry without being subjected to the influence of a dry-air disinfector.

Dr. KINGSTON FOWLER read a paper on False or Functional Cardiac Murmurs, which will be published in a future number of THE LANCET.—Dr. SAMUEL WEST noticed that a very large number of the murmurs were exocardial; some of these murmurs were due to movements of the air in the lung, but there were probably rarer than those due to conditions of the blood. Mental excitement might cause a murmur in the second right intercostal space, and the presence of such a murmur might lead to the "refusal of a life" at an insurance office. He spoke of the blowing systolic murmur at the left apex in cases of chlorosis. Reference was also made to functional murmurs in the course of rheumatic fever. Dilatation of the axillary artery might accompany the signs of dilatation of the left ventricle. The intra-ventricular origin of murmurs was defended.—Dr. SANSOM said he estimated Dr. Fowler's paper as a most practical one. It was most important not to give offhand answers in regard to the nature of any murmur. He agreed with the views of Ludwig and Hesse, which referred regurgitation to temporary feebleness of the muscles which close the auriculo-ventricular orifices. He could not believe that the murmur heard at the second left intercostal space was due to mitral regurgitation, as held by Balfour and Naunyn. The excessive vibration of the septal segment of the mitral valve was the probable cause of the murmur heard at the left base in cases of anæmia.—Dr. ANGEL MONEY referred to the frequency with which the sounds over the right ventricle and pulmonary artery were altered and rendered louder in conditions of obstruction of the pulmonary circulation.—Dr. KINGSTON FOWLER briefly replied.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of the above Society was held on Wednesday, October 8th, Henry Gervis, M.D., President, in the chair.

The following were the specimens shown:—1. Two Cysts of the Broad Ligament filled with Tarry Fluid, removed by Abdominal Section, by Dr. Malins. 2. The Ovaries and Tubes, removed from a case of Pyosalpinx by Operation, by Dr. Malins. 3. Tumour of the Upper Part of the Vulva, removed by écraseur, by Dr. Potter. 4. Pelvis from a case of Mollities Ossium, by Mr. Griffith. 5. Cyst of the Uterus, by Mr. Griffith. 6. Ovarian Tumour, by Dr. W. Duncan. 7. Neugebauer's Intra-uterine Glass Tube, by Dr. Barnes. 8. Glass Female Catheter, by Dr. Barnes.

Mr. J. HOPKINS WALTERS read a paper on Post-partum Avulsion of the Uterus, with a case followed by recovery. In April, 1882, Mr. Walters was called by Mr. Cockran of Caversham to a patient aged twenty-two, in her third confinement. She had been attended by a midwife, who, after the birth of the child, finding the placenta did not come away, pulled at the cord, which broke at its attachment. She then introduced her hand and tore away the whole of the uterus with the right ovary and Fallopian tube, portions of the round ligaments, left Fallopian tube, and ligament of the left ovary attached to it. Mr. Walters saw the patient twenty-one hours after the accident, and found her under the influence of opium, and somewhat recovered from severe collapse. A large quantity of omentum protruded from the vulva, and in the upper part of the vagina was an enormous rent. Mr. Walters ligatured and cut away the omentum, which was cold and badly bruised, at the level of the vulva; the parts were washed with solution of permanganate of potash, and a pad of salicylated wool applied. The opiate was continued; cathe-

terisation ordered every eight hours, and the diet limited to milk and beef-tea. The patient did well until the fifth day, when she was seized with shivering; her temperature fell to 97·4°, and the pulse rose to 170. Mr. Walters irrigated the vagina with solution of permanganate of potash, and, finding that the vaginal fundus had well closed round the omental stump, afterwards used a solution of carbolic acid; quinine, in large and frequent doses, was combined with the opiates, and the vagina syringed every eight hours. On the twenty-eighth day the patient was able to drive five miles to the Royal Berkshire Hospital, where she remained under Mr. Walters's care until the beginning of July, when the omental stump had frittered away, and the vaginal wound was perfectly cicatrised. At the present time, two years and a half after the mutilation, the patient is in perfect health and attending as usual to her ordinary occupations. After a diligent search Mr. Walters has found reports of thirty-six cases of accidental removal of the puerperal uterus, of which fourteen recovered. Of all these, only three were, without doubt, unattended by previous inversion of the uterus. Having regard to the medico-legal aspect of these cases, Mr. Walters draws an important distinction between the accidental removal of the previously inverted uterus and of the uterus that has not undergone inversion, on account of the possibility of uterine separation through spontaneous rupture. According to present experience, inversion of the uterus is not found to coexist with rupture either of that organ or of the vagina; and where it is shown that the uterus was inverted before being torn away, it becomes tolerably easy to estimate the degree of criminal responsibility attaching to the attendant. On the other hand, where it can be proved that the uterus was never inverted, it is impossible to assert that the separation of the uterus was wholly due to violence, and not contributed to by a spontaneous rupture through the uterine or vaginal walls. Mr. Walters quotes cases and authorities to prove the occasional insidious occurrence of uterine rupture, the suspension of symptoms, and the completion of childbirth in spite of it, in some cases independently of manual interference, and without any disproportion between the maternal passages and the child; and concludes that in giving evidence in such cases, these facts should be most carefully remembered.

DR. P. HORROCKS read a paper on a case of Rupture of the Uterus. M. B——, aged thirty-four years, was in her ninth pregnancy; in the eighth one, twins were born fifteen months ago. In her ninth pregnancy labour came on at full term, and nothing abnormal was noticed when she was first examined; the os was dilated and the membranes bulged through it; presentation vertex. Two or three severe pains came on, following one another very quickly, and the vertex appeared at the vulva covered by the unruptured membranes. These were immediately ruptured and the child (alive) was driven entirely outside the vulva by the powerful parturient action, which had at the same time caused a rupture of the uterus running nearly longitudinally but inclining obliquely downwards to the left, and involving part of the body, the whole of the cervix, and a portion of the upper part of the vagina. There was not any external hæmorrhage, and the patient seemed all right for about ten minutes, when she became faint and collapsed, vomiting some dark brownish fluid. The placenta was expelled by the uterus after injecting hot water into the vagina. The author arrived soon after this, and found the rent already described. The patient died from shock before anything could be done. There were only a few clots in the pelvis.

The PRESIDENT remarked on the value of Mr. Walters's paper, both from the forensic and obstetric point of view. He did not quite gather in what way the projecting omentum had disappeared, and he would like to ask whether examination had detected undue softening of the uterine tissues.—Dr. AVELING asked if any penal action had been taken against the midwife. He thought the case another strong proof of the necessity of passing a Bill to ameliorate the present ignorant and dangerous class of midwives.—Dr. BRAXTON HICKS thought that in Mr. Walters's case there was already a rent of the junction of the uterus and vagina, and that the midwife had passed her hand through the rent in mistake for the flabby os uteri, had pulled down the omentum in mistake for the placenta (an error he had seen before), and then the uterus. Rupture of the uterus and vagina is produced by the essential contractions of the uterus, and bearing down pains are not necessary. When an obstacle occurs to the head of the fœtus after its escape from the os, the uterine force is expended on the uterus and upper part of the vagina as a kind of recoil. When a laceration has once begun, but little force is needed to extend it, and when the fœtus is placed nearly symmetrically, the vagina may be torn all round. The broad ligaments are not capable of resisting much force, nor are the round ligaments. A very slight force will free the uterus after the severance of the vagina. In the case of Popplewell's, alluded to in the paper, he was assured privately that no force had been used. He did not think that in simple removal of the placenta from a sound uterus and vagina it would be possible to tear the uterus away. After the uterus has been torn away from the vagina and most of its attachment, bearing down might conceivably complete its detachment and expulsion.—Dr. CHAMPNEYS said that the uninverted uterus might conceivably be torn away by inserting one or more fingers through the cervix, retroverting the fundus, hooking the fingers backwards and pulling.—Dr. BARNES confirmed the view taken by Dr. Hicks that the uterus had the power by virtue of its *vis insita* of contracting and pulling on the vagina and broad ligaments even apart from any central nervous supply, for a short time at least. Expression of the placenta (practised by the midwife in Mr. Walters's case) requires caution, and may produce inversion. The proper way is to use both hands, and press the anterior wall against the posterior.—Dr. HERMAN said that in any future case of the kind in which evidence on the subject might be required in a law-court, all available facts would be found in Mr. Walters' paper, which had shown that in certain conditions avulsion of the uterus is effected with great ease, and had been frequently effected by qualified medical men. Remembering the rarity of these cases, and the sudden emergency which arises, a medical man should not be hastily condemned as a criminal, and still less a midwife.—The PRESIDENT said that while avoiding hasty condemnation in any individual case, in the absence of a knowledge of all the facts, he could not but regard the avulsion of a whole uterus, inverted or not, as a very grave and responsible proceeding.—Dr. GRIFFITH referred to a case in which a fibroid had been mistaken for the placenta. Post-partum hæmorrhage had induced the practitioner to use some force, which might have inverted the uterus.—Dr. BRUNTON thought the removal of an inverted uterus a sign of incompetence, or even criminality, seeing that the absence of inversion can be easily proved by abdominal palpation of the puerperal uterus.—Dr. BARNES replied that the uterus might be by natural efforts or aided by alight and not culpable manipulations, entirely detached. Casper mentions a case in which the broad ligaments even were torn through by spontaneous force. When the uterus was lying loose the hand introduced to remove the placenta might easily bring it away, and the practitioner be blameless. Those of largest experience would judge most mercifully.—Mr. WALTERS, in reply, said that the omentum, after becoming highly vascular, slowly disintegrated by molecular death and disappeared. He did not receive the uterus until many days had elapsed, and consequently no microscopical examination of its fibres was made. It looked, however, perfectly healthy and of quite average thickness throughout its walls. No penal action was taken against the midwife, and he was thankful this was so, as, although he still believed great violence was used, he should have given much stronger and more positive evidence against the woman than subsequent study of the histories of these cases would have justified. Comment had been made on the various ways in which, during operative procedures, the uterus might be detached from its connexions, but one mode had not been mentioned—viz., that in the attempted introduction of the hand within the uterus, either for turning or to remove retained secundines, the organ might be forced up and the tissues of the cervix or vagina, if friable, torn through. He would feel greatly obliged if Fellows would bring to his notice any account of similar cases not included in his paper.

MEDICAL OFFICERS OF HEALTH SOCIETY.

Metropolitan Sanitary Administration.

THE first meeting of the session was held on Oct. 17th, when the President, Dr. ORME DUDFIELD, delivered an inaugural address. After congratulating the Society on the complete success of the conference at the International Health Exhibition, managed by the Society conjointly with

the Sanitary Institute and Parkes Museum, and referring to the services of Dr. Northcote Vinen, who had resigned the post of hon. secretary after more than twenty years' service, he proceeded to deal with the subject of Metropolitan Sanitary Administration. First of all he sketched his idea of what a London Government Bill should be, in an abstract of the address deliver by him in the previous session, and then compared the sketch with the scheme of the Home Secretary. There was so much of similarity in the two that he could not consistently enlist himself in the ranks of the opponents of the Bill. After referring to the grounds of opposition raised by the Corporation and local boards, and taking into consideration the probability of the Bill not meeting with acceptance in Parliament, he proceeded, in the second place, to suggest an alternative scheme. The Corporation might be left alone, or, under a reformed constitution, allowed to rule over the City; the Metropolitan Board of Works being placed, in regard to the rest of London, in the position assigned in the Bill to the new Common Council. The vestries would be maintained in their present position as local executive bodies, subject to efficient control by the Board, so as to secure the desired unity and uniformity. Reference was made to the mode of election of members of the Board and vestrymen, and to plans by which this might be amended. Whatever scheme might be adopted—that of the Government or such a one as he suggested—the Central Board, as the chief sanitary authority, should be endowed with the powers and duties with respect to infectious diseases, provision of hospitals and ambulances, &c., at present exercised and performed by the Asylums Board. It was possible, of course, that no Bill might get adopted. The Bill of the Government might be rejected and they might refuse to bring in another. He proceeded to ask therefore, in the third place, whether it was inevitable, in either contingency, that London should wait indefinitely for an instalment of reform in its sanitary administration? Reciting the powers already existing which, *inter alia*, enabled the Metropolitan Board to make bye-laws in regard to a variety of matters, he contended that if such powers were exercised, covering as they did pretty well the whole field of sanitary administration, London government might be conducted in a fairly satisfactory manner by the existing authorities. He stated his reasons for believing that the framers of the Metropolis Management Act must have contemplated a close union between the board and the vestries, such as he advocated, and cited several sections of the Act which enable the Board to make bye-laws for regulating the drainage of houses, disposing of refuse, &c., and to make orders for the guidance, direction, and control of the vestries in regard to sewerage. Theoretically, nothing more, nothing better, could be desired, provided only that the vestries carried out their part in the matter by loyally enforcing the bye-laws. But no such bye-laws for regulating drainage and disposing of refuse were in existence; while, with regard to sewerage, no definite principles had been laid down, each local board having its own views on the proper size and material of sewers, the differing plans being equally approved by the Board. Having in view the probability that no opportunity of dealing with Metropolitan government would be forthcoming next session, a time of grace was afforded which, if wisely used in efforts to put existing powers into force, might avert the necessity for any material change. But if the vestries, for instance, desired to prolong their rule, they must prove their utility; and more than one opportunity of doing this was offered. For example, they must deal with the dwellings of the poor, in regard to the state of which the public conscience had been greatly stirred; as witness the formation of the Mansion House Council and the appointment of a Royal Commission. The power to make regulations for houses let in lodgings or occupied by members of more than one family must be exercised. The Society had framed standard regulations for their guidance in 1879. Few of them had exercised the powers, but if they had sinned by their neglect it was in good company, as the Local Government Board had failed until within the last few months to exercise its power, conferred in 1874, of declaring the enactment of Section 35, Sanitary Act, 1866, to be in force in all parts of the metropolis. The Society had framed useful regulations for the guidance of sanitary authorities in supervising bakehouses. Illustrations of the value of bye-laws were cited, special reference being made to those framed by the Metropolitan Board with regard to foundations and sites of buildings, under the Building Act, 1878; to offensive trades, under the Slaughter-houses (Metropolis) Act, 1874; and to dairies, cowsheds, and milkshops, under the Dairies, &c., Order of 1879. Incidentally the Slaughter-houses Act had led to a great reduction in the number of private slaughter-houses, while the offensive businesses regulated had been conducted subject to definite regulations, enforced by an irreducible penalty for any breach, in a satisfactory manner, quite impossible when they were subject to the general law of nuisance only. The Society had taken a leading part in promoting sanitary reform in connexion with offensive trades, dairies, and cowsheds. The legal status of the local authorities and of their medical officers in relation to the regulated businesses was unsatisfactory. They should have statutory powers to carry out the bye-laws under the general supervision of the Metropolitan Board. Regulations made by the vestries providing for the periodical removal of manure were rendered nugatory by the reluctance of magistrates to inflict adequate penalties for breaches. Some limits should be set to the power of magistrates to reduce and remit penalties for offences against sanitary laws. Good work might be done under the water regulations if the sanitary authority had concurrent power with the water companies to enforce them. The Local Government Board had urged the vestries to bring about "severance of all connexions of waste-pipes of cisterns with drains," but this, as it had been pointed out to the Board, could be done universally by the companies only—viz., by the exercise of their power under Regulation 14. The companies had responded in some measure to the representations of the Board by issuing a notice to their customers, calling attention to the advice with regard to waste-pipes, cleansing of cisterns, &c., given by Sir Francis Bolton, the water examiner, in his monthly and annual reports. The power of water companies to cut off water for non-payment of rates should be totally abolished. When all existing powers had been exhausted Parliament would confer whatever additional powers were proved necessary. Among others the Metropolitan Board should have that of fixing upon sites for mortuaries and disinfecting chambers, and for baths and washhouses upon a plan so arranged as to provide for the needs of the population irrespective of local boundaries. Having so far dealt with "sanitary powers," the address next dealt with "sanitary difficulties," which were partly inherent in the law itself, and partly incident to the method of its administration after this had passed from the sanitary to the judicial authority. There was no power to punish the person who created a nuisance, however grave or long-continued it might be, and it took an inordinate time to get a nuisance abated, when the author of it proved recalcitrant. The public, naturally supposing sanitary law to be the embodiment of common sense as applied to matters of public health, were too apt to regard the sanitary authorities as all-powerful but apathetic, and to lavish blame upon them for not abating nuisances immediately upon discovery or report. But the law was too considerate of the rights of property, and too leisurely in its movements to allow of this being done. Months even might elapse before a nuisance could be abated. Aggrieved tenants were liable, moreover, to be made to pay compensation to the landlord, in the shape of increased rent, for the trouble and expense to which he had been put. The remedy for the state of things described was twofold. The magistrates should have power (as outside London they have, under Section 96 of the Public Health Act, 1875) to inflict, by their order, a substantial penalty on the author of the nuisance, and the vestry should have power to enter upon the premises to abate the nuisance when it was certified by the medical officer to be dangerous to health, and the time allowed in the vestry's notice for its abatement had expired. Reference was made, in conclusion, to cases that had come before the courts, in which tenants had proceeded against their landlords to recover damages for injury to health, resulting from drainage and other structural defects. Decisions had been given in their favour and were of importance as precedents. There should be an implied warranty when a house was let that it was fit for human habitation.

On the motion of Dr. Bristowe the thanks of the Society were given to the President for his address; and on the motion of Mr. Shirley Murphy, seconded by Mr. F. M. Corner, it was resolved to print the address and forward it to the Local Government Board, the Metropolitan Board of Works, the vestries and district Board, and other parties interested in the question of London government.

The proceedings of the meeting were brought to a close by

the presentation of a testimonial to the retiring hon. secretary, Dr. Vinen, in the shape of a handsomely engrossed and framed copy of a resolution passed at the annual meeting held at the International Health Exhibition in June.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

THE first meeting of the Society for this session was held on Oct. 10th, the President, Dr. Bell, in the chair.

The PRESIDENT delivered an introductory address, in which he contrasted the practitioners of fifty years ago with those of modern times as regards education, general and professional, social status, work, and physique. The latter he maintained to be better in the older practitioners, who had to face all weathers without the luxurious carriages in present use, while the rare use of old midwifery instruments caused the hours of work to be longer. The practitioners of to-day shrank from many duties which formed part of the routine of past times and midwifery tended more and more to fall into the hands of women.

Dr. MYRTLE read a paper entitled "Sweating to Death." The patient, a healthy active man, after suffering for three weeks from pains of a rheumatic character relieved by sodium salicylate, was seized with profuse sweats, which were frequently of a most offensive character, lasting at times for ten hours. Atropine and ergotine both caused sudden symptoms of collapse. He improved for a time on arsenic, and the perspiration lost its fetidness. He died from exhaustion 121 days after he first felt the flying pains. No post-mortem could be obtained. Dr. Myrtle regarded the case as one of paresis of nerves supplying the sweat-ducts, caused by frequent exposure to cold during his employment.

Dr. BRAITHWAITE, Dr. HUTCHINSON, and Mr. WHEELHOUSE related cases of Excessive Sweating, which in one instance was relieved by the external application of belladonna liniment, and in another by taking copper sulphite.—Dr. JACOB thought the intermittency of the attacks precluded a peripheral paresis, and pointed rather to the sweat centres being affected.

Dr. SOLOMON SMITH read a paper on Visceral Neurosis, urging the view that these were often reflex, and not due to nervous defect. One might conceive that through the nervous system a continuity was maintained between all the cells of the organism, and that the activity of any organ was not due to a stimulating force originating in any so-called "centre," but to stimuli resulting from the sum total of the impressions received by the nervous system from every part of the frame. A neurosis, then, might either arise in consequence of morbid centripetal impulses from other organs, or from primary defect of the nervous system. More good could therefore be done in many cases by relieving peripheral irritation than by nerve medication.—Dr. CLIFFORD ALLBUTT also urged the importance of investigating peripheral causes in nervous gastric disorder. He denied that a non-neurotic subject could be rendered neurotic by overwork or exhaustion.

Mr. MCGILL read a paper on two cases of Charbon. In the first the patient was inoculated while skinning a beast known to be diseased. He was admitted to the infirmary with cellulitis of the arm, and died collapsed in a very rapid manner. The second case presented a well-marked pustule on the arm, which was excised, and the patient recovered. In the first case no bacilli were found in the blood during life, but many immediately after death.

Dr. JACOB showed the Malignant Pustule from the above case mounted in glycerine jelly. He also showed microscopic specimens of Bacilli Anthracis from the two cases above, and from two recent cases of woolsorters' disease which had occurred in Bradford, together with diagrams showing this structure of the pustule and the forms of the bacilli.—In the discussion which followed Dr. BELL gave an account of similar cases, pointing out the want of correspondence between the constitutional and local signs in many of these cases. It was also mentioned that some fifteen of the beasts known to be diseased had been recently sent to the Leeds market; and we must therefore presume, as no ill-effects had followed, that the spores of the organisms could be destroyed by the heat used for cooking.—Drs. BRITTON, RABAGLIATI, and S. SMITH joined in the discussion.

Mr. A. W. MAYO ROBSON showed a patient on whom he had operated in March, 1884, for Ununited Fracture of the Spine of the Scapula, which had been produced by a fall of earth fifteen months previously. He had been treated at first by his own doctor, and afterwards as an out-patient at the Leeds Infirmary, but when he was admitted for operation a gap of an inch could be felt between the fragments, and the arm was useless. The refreshed ends were united by two silver sutures, which were pressed down flat and left in. The operation was done antiseptically. The result was most satisfactory, the patient having a useful and powerful arm, with all its movements perfect.

Reviews and Notices of Books.

Diseases of the Heart and Thoracic Aorta. By BYROM BRAMWELL, M.D., F.R.C.P.E. Edinburgh: Young J. Pentland. 1884.

IN this elegant and profusely illustrated volume Dr. Bramwell has entered a field which has hitherto been so worthily occupied by British authors—Hope, Hayden, Walshe, and others; and we cannot but admire the industry and care which he has bestowed upon the work. As it stands, it may fairly be taken as representing the standpoint at which we have arrived in cardiac physiology and pathology. For the book opens with an extended account of physiological facts, and especially the advances made of late years in the neuro-muscular mechanism of the heart and bloodvessels. Although in this respect physiological research has outstripped clinical and pathological observation, Dr. Bramwell has, we think, done wisely in so introducing his treatise, and has thereby greatly added to its value. Following this chapter there is one on the general pathology of cardiac lesions, which in the main consists in a systematic and orderly classification of the various functional and organic derangements. Then comes a lengthy exposition of the methods of clinical investigation, including an analysis of the various symptoms of heart disease. Amongst these latter we find an elaborate discussion of the phenomenon of Cheyne-Stokes' respiration, in which the various theories advanced by Filehne and Traube are dealt with, and a view of the mechanism of the symptoms, illustrated by a series of diagrams, stated. It must be confessed that the author is right in his assertion that we have still much to learn concerning this curious phenomenon, and we trust that many will be prevailed upon to employ the form of inquiry he publishes in the observation and record of cases that may come under their notice. The physical examination of the heart is treated at great length, and, particularly as regards cardiac murmurs, it may fairly be said to be exhaustive. It could hardly be expected that the author would fail to notice the views advanced by Balfour and others respecting the nature of functional murmurs, for he has already entered the lists against Dr. Balfour's hypothesis. At the same time it must strike the reader that perhaps too much space has been devoted to this single but highly interesting point, and the impression left after the perusal of these pages is that the question is one almost insoluble. It affords, however, an opportunity to the author of showing his skill in argument and critical analysis, with the result that he falls back upon the long-accepted doctrine that chlorotic murmurs have their origin mainly in the pulmonary artery, at least in the early stage. Remarks on the use and teachings of the sphygmograph conclude this chapter.

The chapter on pericarditis does not call for much by way of comment. It is abundantly supplied with tables intended to contrast the points of differential diagnosis between the conditions of pericardial effusion, cardiac hypertrophy or dilatation, hydropericardium, exocardial and endocardial bruits, &c. The signs of adherent pericardium are discussed, their enumeration being given as follows:—1. Systolic depression, instead of systolic protrusion, of the

apex beat; and in many cases a systolic depression of the lower end of the sternum and adjacent costal cartilages. 2. Permanent depression of the præcordial region. 3. A diastolic rebound of the chest wall. 4. Absence of the apex beat. 5. Fixation of the apex beat. 6. When the lungs are at the same time retracted and fixed by adhesions, the area of pericardial dulness is not only enlarged, but remains of the same size during inspiration and expiration. 7. Distension of the veins of the neck during the systolic depression of the chest wall—i.e., during the systole of the ventricles—followed by their rapid collapse and disappearance during the diastolic rebound—i.e., during the diastole of the heart. Under Endocarditis, the author discusses, first the "simple," and then the "ulcerative" form, giving a very clear account of the latter, which so often complicates chronic valvular disease, but the etiology of which is still so obscure. We note that Dr. Bramwell is strongly persuaded that acute endocarditis is sometimes transient, adducing in support of this view the fact that the preponderance of fatal cases of chorea present valvular vegetations, the inference being that such have also been present in non-fatal chorea with fugitive murmurs. He is also inclined to believe that the early murmurs in rheumatic fever are organic and not anæmic, even though they may disappear; but he suggests that some of these bruits may be due to myocarditis without any valve inflammation. As to treatment, he is a staunch upholder of the free administration of salicin as early as possible in a case of acute rheumatism; and thinks that it is possible to anticipate and prevent endocardial inflammation by such treatment. He agrees with Dr. Maclagan in discarding salicylate of soda from its alleged depressant action on the heart, but we must confess that the evidence of this is not very convincing. The subject of valvular disease is next dealt with fully, and forms indeed one of the most attractive sections of the volume. The sixth chapter is devoted to diseases of the myocardium, and the seventh to neuroses—viz., palpitation and angina pectoris. A chapter upon thoracic aneurysm terminates a work which from the scientific manner in which the subject is treated, from the care and discrimination exhibited, and the copious elaborate illustrations with which it is adorned, is one which will advance the author's reputation as a most industrious and painstaking clinical observer.

OUR LIBRARY TABLE.

Madère étudiée comme Station d'Hiver et d'Eté. Par le Docteur JULIUS GOLDSCHMIDT. Pp. 36. Paris: Delahaye et Legrosnier. 1884.—This work gives a short account of Madeira and its climate, illustrated by thermometric, hygrometric, and barometric tables. The author, after a brief notice of the prevailing diseases to which residents may be exposed, has given in detail the cases which, in his opinion, are likely to derive benefit from a residence there. His advice and cautions to invalids are judicious. Full information is afforded as to the various routes by which the island may be reached and the accommodation provided for visitors. The book is evidently intended chiefly for the use of French invalids; and the author states, as one of the drawbacks of the island, that, while in the hotels and boarding-houses there is every comfort to be found, there is also English cookery. It seems well adapted to afford information to the class for whom it appears to have been written.

Aix-les-Bains (in Savoy). The Medical Treatment and General Indications. By Dr. BRACHET. Pp. 174. London: Renshaw. 1884.—This work has been written with the purpose of showing the value and influence of the medical treatment of Aix-les-Bains and Marlioz. An analysis of the waters by M. Wilm is given, and a detailed account of the mode of using them, but there is no information afforded respecting the climate. The greater part of the book is taken up with an account of the diseases to the treatment of which Dr. Brachet considers the waters to be applicable, illustrated with notes of cases. The author, in our opinion, has fallen into the very common error of including far too many diseases in this category. As far as we can gather the diseases in which the waters of Aix should be avoided are very few, and may be grouped as "congestive phthisis, complicated by intense febrile symptoms and repeated hæmoptysis," cancerous diseases, atrophy or hypertrophy of the heart, dilatation, or aneurysm of the heart and of the large vessels, angina pectoris, and nervous irritability or congestion of the brain. An analysis is given also of the sulphurous waters of Marlioz and Challes. The last forty pages of the book are devoted to an account of Aix-les-Bains, its accommodation and amusements, and of the places of interest which may be visited from it.

The Journal of Physiology. By MICHAEL FOSTER. Vol. V., No. 3 and Supplement to Vol. V.—The present parts contain the following memoirs and a bibliography of the physiological papers published in 1883:—1. Schäfer: A Method of Recording Changes of Volume by Means of Photography and its application to the Plethysmographic Record of the Normal Frog Heart, with a Plate. 2. By the same author: A Description of the Piston Recorder, an apparatus for Recording and Measuring the Changes of Volume of the Contracting Frog Heart, with a Plate. 3. H. Sewell: On the Physiological Effects of Light which enters the Eye through the Sclerotic Coat. 4. H. C. Wood: Note upon Antipyretic Salines. 5. S. Politzer: On the Temperature Sense; a Contribution to the Physiology of the Skin as an Organ of Sense, with a Plate. 5. W. D. Halliburton: The Proteids of Serum, with a Plate.

The Quarterly Journal of Microscopical Science. Edited by Professors LANKESTER, DYER, KLEIN, MOSELEY, and ADAM SEDGWICK. No. XCVI. October, 1884.—This part contains a memoir by William Patten of Boston, U.S.A., on the Development of Phryganids, with a preliminary note on the Development of Blatta Germanica. Mr. Patten found in the earliest stages of the yelks examined by him numerous germ-cells, together with an irregular network of protoplasm. All the nuclei and the protoplasmic network migrate to the surface and become converted into blastoderm, which becoming thickened at one point forms the ventral plate. From this plate cells arise by budding and migrate into the yelk and ultimately form true entoderm cells. All the mesoderm arises from an invagination which takes place along the median line of the ventral plate. The further stages of the development of these insects are carefully followed. 2. A memoir on the Development of Halisarca lobularis, a species of sponge, by W. J. Sollas. 3. A contribution to the knowledge of Rhabdopleura, by Ray Lankester. 4. A description of Caldwell's Automatic Microtome. 5. H. Caldwell, on the arrangement of the Embryonic Membranes in Marsupial Animals. 6. Alice Johnson, on the fate of the Blastopore and the presence of a primitive Streak in the Newt (Triton cristatus). Justus Carrière, on the Eyes of some Invertebrata. Lastly, a note on Protoplasmic Movement. This part closes Vol. XXIV. It contains 23 plates.

The Medical Chronicle. A Monthly Record of the Progress of the Medical Sciences. Vol. I. No. 1. Manchester: J. E. Cornish. This new periodical has started well, and we wish it every success. The original contributions, five in number, are of excellent character. Dr. Roberts of Manchester writes on Tests for Albumen; new and old. It is needless to say that this contribution is a masterpiece of clinical chemistry. Dr. George Johnson, however, takes exception to certain statements concerning the picric acid test. The article by Dr. Dreschfeld on the Pathology of the Lung Complications in Diabetes is a careful study of the

subject, and is sure to be widely read. Of the department headed "Chronicle" we shall say but little, but we must remark that the abstracts are well done, and will serve the purposes to which they will be put. Medicine, Therapeutics, Surgery, Midwifery, Diseases of Women, Diseases of Children, Physiology, Diseases of the Eye, of the Skin, of the Ear, of the Throat, Forensic Medicine, and Toxicology are the subtitles of the Chronicle. We have said sufficient to show that *The Medical Chronicle* is a careful and thorough attempt to place before its readers a record of the progress of medicine.

The Social Code, 1884. Compiled by GEORGE AGER, LL.D. pp. 224. London: Effingham Wilson. 1884.—This code, enabling the senders of telegrams to express themselves in few words, is specially adapted for the everyday requirements of social life. The advantages of secrecy and economy are attained, and by limiting the number of words the chances of error in the transmission of messages are reduced to a minimum. Those who are in the habit of extensively using the telegraph, especially in connexion with foreign countries, will find this code extremely serviceable.

New Inventions.

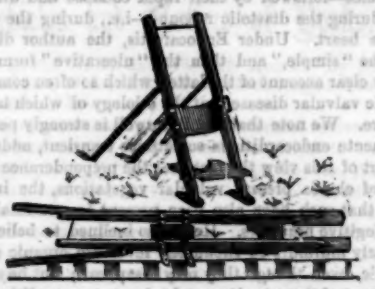
APPARATUS FOR DRY-AIR DISINFECTION.

DR. BRAXTON HICKS showed at the Medical Society of London, on October 27th, an economical apparatus for antiseptic treatment by medicated air, simple and cheaper than others, but on the same principle. It was made for him by Mr. James Allen (21, Marylebone-lane), and is worked by foot bellows manufactured by Griffiths (Garrick-street). It consists of a pewter cylindrical vessel, having a screw lid, this having itself a smaller opening with a screw lid (A in figure). There are two openings (C and D) with tubes, one

opposite the other; that in connexion with the bellows (C) dips down to the bottom inside. The interior of the vessel is filled with sponge clippings, saturated with carbolic acid, eucalyptol, thymol, pine oil, or any other volatile substance, single or in combination. The large lid enables one to fill or remove the sponge; through the smaller lid the sponge can be charged or moved about. Rubber tubing connects the one side with the bellows, and the other with a tube to direct the air-current. To warm this current, and to increase the percentage of volatile material, the apparatus can be placed in hot water. The size of the apparatus exhibited was ten inches high and four inches in diameter. It was pointed out that it afforded a ready means of disinfection and of deodorising the air of a chamber.

A NEW BED-LIFT.

THE accompanying engraving represents a new bed-lift and chair combined, shown by Mr. Newham at the rooms of the Medical Society of London on the 20th ult. The seat is placed under the knees of the patient. The levers, one on each side, are hooked to the seat, which is then



drawn close to the body of the patient; the band is then passed under his back, and buckled to the opposite side. The patient can now, by raising the levers, be lifted without any effort on his part into a sitting position. The manufacturers are Messrs. Viney and Co., 181, Great Portland-street, W.

SINGULAR CAUSE OF DEATH.

To the Editor of THE LANCET.

SIR,—I beg to call your attention to the facts sworn to at an inquest, held by me at the Surrey County Lunatic Asylum, on October 3rd, 1884, on the body of J. S——, aged thirty-one years, an inmate.

The deceased was admitted into the institution about a week before her death, suffering from delusions, amongst others, that she had imps in her stomach, who were constantly coming into her mouth, and that smoke was coming out from the walls in order to smother her. The evidence of the medical officers was to the effect that they had never noticed that she evinced any suicidal tendencies, but that she was extremely careful of herself and dreaded any harm coming to her. She was at times refractory and excitable, and on the night of September 29th, being in that state, she was sent to bed in a room by herself at an early hour; no one but the attendants having access to her room. At 10.20 P.M. she was visited by an attendant, and was then seen to be quietly sleeping in her bed. On being visited about two hours and a half afterwards, she was found lying dead on her face, with a large quantity of her night dress crammed into her mouth. The attendant endeavoured to pull it out, but so firmly was it fixed in that the medical officer was sent for, and after some difficulty he removed it, and immediately marked in pencil the part that was wet, in order to ascertain how much she had swallowed. It was then found that about *one half a square yard of thick coarse calico* had been thrust down her mouth and throat.

The jury came to the conclusion that the deceased had thrust the calico down her throat in order to stifle the imps in her stomach, and without any thought that in doing so she would deprive herself of life, in which conclusion both the medical officers concurred, and they therefore returned a verdict of death from misadventure.

The case seems interesting from the fact that so much of the calico could have been forced by the deceased down her mouth and throat before all muscular power was lost.

There are cases somewhat similar mentioned in the works of medical jurisprudence; but none that seem to approach the facts of this case in regard to the quantity of material swallowed by the deceased or in the evident absence of suicidal intention. I remain Sir, yours faithfully,

A. BRAXTON HICKS,
Elm-court, Temple, E.C., Oct. 1884. Deputy Coroner for Surrey.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 1, 1884.

A CRISIS in the history of medical education in this country seems to be rapidly approaching, and unless action of a vigorous and thorough kind be taken, a few years may witness a remarkable and indeed a deplorable state of things. There is no need to disguise the fact—it is patent to all who have taken any part in medical teaching—that the large share which the metropolis has hitherto enjoyed in this work is being seriously threatened. It hardly seems credible that this great city, the home of upwards of 4000 medical practitioners, a number exceeding one-fourth of the total number in England and Wales, with its abundant material for medical study, its numerous schools, and vast army of hard-working, earnest, and able teachers, a place which has no equal in the world as regards the resources for such education, should be in danger of losing the favour it has so long enjoyed. Yet from all sides—from the teachers who see their most promising pupils pass from their view before their course is completed; from the students themselves, who find out that the advantages of study in London are more than counterbalanced by the exceptional difficulties in the way of their attaining adequate acknowledgment of their labour; from the practitioners, who deplore the fact that a university degree was denied to them because they had been brought up in London and not in Edinburgh—the same cry comes. Nor does the general impression lack the support of statistics. One of our contemporaries published last week some figures contrasting the entries of medical students in the London and in the Scottish schools for the past few years, which show a steady decline in the former and an increase in the latter. Again, it is a notorious fact that a large proportion of the graduates of the Scottish Universities are Englishmen, which is clearly shown from figures supplied from another source; that amongst all the medical practitioners of England, 61·2 per cent. hold Scottish degrees, and only 20·3 per cent. are graduates of one or other of the English Universities. Couple with this the fact that 98 per cent. of the medical practitioners in Scotland hold a degree from a Scottish University, and the reason for the declining popularity of the London schools is manifest. There is a growing desire to be possessed of a qualification which shall carry with it the title of "Doctor," and the student or his advisers perceive that no more learning is needed, no greater effort demanded, to obtain such a diploma in other places than is required in London to obtain a mere licence to practise. Nor is it by any means unusual for students to abandon their London career at a time when they would be most able to profit by its continuance, in order to complete their education and to fulfil the necessary conditions of residence at the University. They may have to go over the same ground, but they find that the attainment of a degree is not more difficult than would have been the labour for the diploma or licence of an English College.

To all this it may be replied that London does possess a University, and that London students can pass through its portals if they choose. Those who argue thus little know the irony contained within such counsel. The University of London demands a curriculum of more than ordinary extent, and it does undoubtedly place its standard very high. The rejections of candidates for medical degrees are numerous, especially at the Preliminary Scientific M.B. and the Intermediate M.B. examinations; but this would not of itself deter candidates provided that the regulations of the University were made more elastic, and these primary examinations held with greater frequency. Were it otherwise a far larger number of those who, by competing for the Scientific Examination, show their desire to obtain the degree would eventually attain their object. On the present system the loss of time which one rejection entails, added to the "glorious uncertainty" of passing, diminishes the roll, and eventually out of every 100 medical undergraduates but ten complete their full course. It is conceivable that a remedy may be found by the University itself undertaking the gigantic task of reorganisation of metropolitan medical education, and becoming something more than a mere degree-granting body. It might do this successfully without changing its scheme of education, which, after all, does not notably differ from that of other universities, and, by placing itself more *en rapport* with the teaching centres, so remodel its examination system that every London medical student should pass through its hands. It is idle, however, to speculate upon possibilities which will never be realised. That the University of London will ever depart so far from the spirit of its foundation is not to be dreamt of. Its Senate conceives that the mission of the University is of a different kind; and well-meant suggestions for facilitating the graduate's career without diminishing the severity of the tests to which he is subjected have either been misunderstood or deliberately disregarded.

A fundamental obstacle to the University assuming such functions as would place it on a similar footing to that of other universities is that it would practically disestablish the ancient Colleges which for generations before the University was founded did the work of licensing the English practitioner. This work they are still pursuing, and, by a device which unhappily contains within it a blemish likely to defeat its object, they have just mutually agreed to combine for the purposes of examination. This scheme will require modification, notably in the matter of fees, or else it will only quicken the tendency of medical students to forsake the London Schools. But, as we all know, the cause of such an exodus is not solely one of outlay; that is one factor, but the essential thing is, as we have already pointed out, that for the same expenditure of time, thought, and money the student can elsewhere obtain the much-coveted titles of M.B. and C.M., which bear an intrinsic value higher than any membership or licentiateship of any college, however respected and illustrious. Why, then, should not the union of the Colleges be made still closer, and the wedge driven further home? With all the influence they possess, is it difficult to believe that they could fail to establish a University of Physicians and Surgeons, which should not merely examine, but actually control, the resources of medical education in the metropolis? We live in an age of progress and of centralisation. And with regard to our ancient Royal Colleges, the time is coming when their

independent existence will be threatened, unless they submit to the force of events, and merge their individuality in an institution which will enable them to retain the control they have so long held over medical education. It is futile to dream of establishing another brand-new university when the materials lie ready at hand for the evolution of an institution which would knit together the centres of medical learning scattered throughout the metropolis, and comprise them all under one compact and well-ordered organisation. Nothing short of this will avert the fate that seems to be impending over the London medical schools.

THE views held with regard to the perineum and its functions vary much; not less so do those regarding the evils resulting from simple laceration of this structure. Some authorities hold it to be one of the main supports of the pelvic viscera. This view of the perineum is by no means uncommon, but no one has enunciated it in so definite and distinct a manner as Dr. GAILLARD THOMAS. He maintains that this body sustains and prevents prolapse of the anterior wall of the rectum and of the anterior wall of the vagina; he, moreover, states that "upon the posterior vaginal wall rests the anterior, upon this the bladder, and against the bladder the uterus, all of which depend in great degree for support upon the perineal body." Further, the perineal body, according to Dr. THOMAS, "preserves a proper line of projection of the contents of the bladder and rectum, and this prevents tenesmus, a frequent cause of pelvic displacements." These functions are performed by what Dr. THOMAS calls the keystone action of the perineum. This account of the perineum is the most boldly original conception of this body and its functions ever given to the profession. A keystone composed of soft and yielding tissues is not only a novel but an unintelligible idea; but Dr. THOMAS is not satisfied with this, for he observes that the keystone is inverted, its apex is directed upwards, and it is attached to the very structures it supports. This extraordinary conception deserves to be kept in remembrance, for if it be true, Nature, in the formation of the female perineum, has accomplished not the improbable, but the impossible.

Others, again, maintain that to support the uterus and to keep it in the pelvis is not one of the functions of the perineum. The pelvic organs are maintained in position by other structures and other means. Dr. MATTHEWS DUNCAN has taught this for many years; and Dr. EMMETT, in a paper read before the American Gynæcological Association, has recently maintained the same view. Dr. EMMETT says: "My belief is that a simple laceration of the perineum, even to the fibres of the sphincter ani, produces no inconvenience after the parts have healed, and only occasionally do we find disturbance of a reflex character due to the presence of cicatricial tissue." This statement appears to be based upon another, the accuracy of which the experience of everyone who has seen much of the diseases of women will confirm. "We can all recall," states Dr. EMMETT, "instances illustrating the condition where the perineum, even in the case of labouring women, had been lacerated for years, with no discomfort, notwithstanding that the vaginal outlet had remained so open that it was a matter of surprise to find the pelvic organs in place." He holds that "the pelvic fascia, forming a sulcus along the side of the vagina, is reflected over the muscles in an attachment around the junction of the vagina with the external soft parts, so that with the subpubic ligament above, the connexion with the coccyx behind, and the tuber ischii on each side, a firm support is given to the outlet."

The old operation of BAKER BROWN, with its various modifications, however small it may have left the vaginal outlet, fails ultimately to check the evils which have been generally attributed to laceration of the perineum. If for a time it prevents the uterus from appearing outside the vulva, this respite is but brief; the tissues united soon yield to the superincumbent weight, and the womb becomes again prodident, while in many cases it is maintained in the pelvis from the first by the aid of a pessary only. This operation is effectual only when a portion of the posterior wall of the vagina has been included in the new union.

Upon the view of the pelvic fascia above given Dr. EMMETT has based a new operation for laceration of the perineum. This consists in uniting the posterior wall of the vagina to the posterior part of the vaginal outlet. The denuded parts consist of two transverse crescents, one at the vaginal orifice, and the other on the posterior wall a little above the orifice. To discover the surfaces to be united, the patient should be placed in the lithotomy position, and the lower portions of the caruncule on either side are to be seized with tenacula, together with the corresponding surface on the posterior wall of the vagina, and the three points are to be brought together. The apparently deep tear of the perineum appears then as a comparatively superficial sulcus. After denudation the transverse crescents should be united first, and then the perineal sulcus. Dr. EMMETT has found this operation to restore the parts to their primitive state before laceration, the repair thus far being permanent.

THE "cycling" community, to judge from its defence to the vigorous attacks recently delivered against it, has been aroused to a sense of the responsibility incurred by advocating the general adoption of a method of travelling at once economical and graceful.

It is not our purpose to enter minutely into the *pros* and *cons* of the arguments adopted by contending sides, but rather to strike a balance on broader grounds between conflicting opinions. Violent exercise—or strain—is undesirable, whatever form it may assume, but in no other case is it of such moment as when it threatens the integrity of structure and the regularity of function of organs necessary to the maintenance of life. It can scarcely be doubted that many a youth has had a career of brilliant promise cut short by the acquired incompetency of his aortic valves, consequent on indiscretion in rowing. In cycling the tension on the circulatory system is decidedly less, but still sufficient to constitute an element of danger, especially when an effort is made to set an example or "beat a record." With regard to the injurious effects of cycling upon the genito-urinary organs, much may be said on both sides. It seems reasonable to suppose that long-continued pressure or frequent impact of the perineum against the pommel or horn of the saddle might end in local thickening, and even stricture of the urethra, to say nothing of ulterior evils; but our investigations

lead us to conclude that, to say the least, such results are exceedingly rare. We very much doubt if it can be shown that irritation of the genito-urinary apparatus by similar means conduces to the acquirement of evil habits in youth, inclining as we do to the belief that there is no greater safeguard against such practices than physical exercise, which strengthens the body and invigorates the mind. But, be this as it may, there should be no difficulty in entirely removing the disputed cause. If the saddle is made of sufficient width to receive the weight of the body fully through the ischial tuberosities, it would be next to impossible for the urethra to be compressed, or the perineal muscles to be thrown into a state of spasm. Excessive use of the lower limbs, incidental to cycling, has a decided tendency to cause prolonged overfilling of the superficial veins, and to the development of permanent dilatation and varicosity. We know of one case in which, from this very defect, a member of our own profession barely satisfied the requirements of the "physical examination" prior to admission to the naval service.

Considering the strain thrown upon the thighs and adjacent parts of the abdomen, it would not be surprising if now and again cases were recorded in which hernia had been acquired by "wheelers" possessing original weakness of the structures bounding the inguinal canal and its apertures, but such a mishap seems to be of very rare occurrence. With a machine made in accordance with the principles inculcated by experience as to what is safest and best to protect from injury, we doubt if any valid argument can be raised against its moderate use. The state of irritability of the spinal cord, known in America as "railway spine," on account of its supposed dependence on repeated concussions from the jolting experienced in long journeys by rail, can scarcely be a frequent consequence of cycling. The natural provisions for the protection of the cord, coupled with the resiliency of a bicycle or tricycle spring as now employed, are competent safeguards against any serious lesion of the nerve centre, either functional or organic, provided the employment of the machine is not pushed beyond reasonable limits.

A VERY important resolution affecting the sanitary administration of the metropolis was arrived at on the occasion of the last meeting of the Metropolitan Asylums Board. For many years past the failure of the metropolitan vestries and district boards to provide adequate means for the isolation of the infectious sick of their respective districts has been matter of great public concern, and the legal proceedings which have for some time past followed on almost every attempt to erect a new infectious hospital, whether permanent or temporary, have evidently put it almost altogether out of the power of such bodies to meet the increasing demand for proper means of isolation. This was fully recognised by the Legislature when, in 1883, owing to the prevalence of cholera in Egypt, the Diseases Prevention (Metropolis) Act was passed; for under this statute it was definitely enacted that the admission of a person suffering from any infectious disease into a hospital belonging to the Asylums Board should not be considered as parochial or charitable relief. In the first instance the Act was only put in force for one year; it was, however, renewed during the past session, and in view of what are apparently the intentions of the Government as regards the future, the Metropolitan Asylums Board have had the whole subject under consideration. The report of the special committee dealing with the matter has been before the managers, who have expressed concurrence with it, and the result is that they have come to the conclusion that the time has arrived when patients suffering from infectious disorders should be admitted to the managers' hospitals upon the orders of medical officers of health, as well as upon those of district medical officers and relieving officers, whose orders alone have hitherto been received. Nearly all the sanitary bodies of London have expressed their concurrence in the views taken by the managers, and since it is now quite evident that this is the only way out of a great and pressing difficulty, it is to be hoped that the application which is about to be made to the Local Government Board to give effect to it will meet with the approval which the importance of the subject demands.

On one point alone we hesitate to agree with the opinions which were expressed at the meeting. Several of the managers wished a representation to be made to the sanitary authorities urging them to obtain repayment of the expenses of isolation from the friends of the patients who might be sent into the hospitals, and pressed that instructions might be given to the officers of the authorities to secure such payment. We cannot but think that experience has proved that this recommendation was not a wise one. Patients are removed to infectious hospitals not so much in their own interests as in the interests of the public, and it is the community that should pay for the safety which they thus secure, much in the same way as vaccination and systems of house scavenging are paid for out of the public funds, either of the country or the district concerned. Besides which, infectious hospitals are constructed and maintained at the cost of the public rates, and this element should certainly be taken into consideration when it becomes a question of admitting into such a hospital any person from a ratepayer's household. Sanitary authorities are not so much given to recovering the cost of isolation as they formerly were, and we think it very unlikely that individual inhabitants of London will often be called upon to pay for removal to an institution which is maintained for the protection of the public generally.

Annotations.

"Ne quid nimis."

EXAMINATION FOR PROMOTION IN THE ARMY MEDICAL SERVICE.

WE have received a revised copy of the regulations in regard to the examination of surgeons and surgeons-major of the army. The most important alteration in them is the abolition of the examination of surgeons-major in operative surgery and practical medicine, to the objections to which we last week called attention. This will now be required only of those officers who have not previously been examined for promotion to the rank of surgeon-major. The revised circular also removes a doubt which had been expressed as to the exemption from this portion of the examination, accorded to Fellows of any Royal College of Physicians or Surgeons of Great Britain or Ireland, being applicable to

surgeons-major, and it omits the qualifying clause that the fellowship must have been obtained five years subsequent to the officer's entry into the service. An exemption from all further examination is also granted to medical officers of any grade promoted for distinguished professional service. We hope that this may be taken as an intimation that promotion on this ground is not to be in future, as it has hitherto been, a nullity. We are glad to find that the Director-General has so promptly taken steps to remove what were, in our opinion, valid objections to the new regulations, and trust they will now be found to act beneficially for the soldier and the profession, without inflicting any injustice or being supposed to cast a slight upon the medical officers.

LAYING DOWN A "RULE OF LIFE."

THE *St. James's Gazette* observes, "It really seems sometimes as if hygienic science were all wrong, and as if late hours, much hard work done under the gaslight, and the smallest possible amount of fresh air were the way to be healthy, if not wealthy and wise. Who lives under more (theoretically) unhealthy conditions than the members of Parliament or the leading counsel learned in the law? But our statesmen are in a green old age at seventy-five, and barristers are quite boyish at sixty; so, too, are actors and actresses." Our contemporary then exclaims, "Sanitary guides should tell us the meaning of these things." So far as we may presume to respond to this appeal, we must be allowed to point out first that there is a fallacy in the inference that because Members of Parliament, busy counsel, and perhaps actors and actresses, live on in spite of the adverse influences of surroundings which are held to be injurious to health, therefore the surroundings of their lives cannot be as injurious as they are supposed to be. One of the earliest exploits in the applied science of statistics as brought to bear upon sanitary questions was the drawing of an inference that because the London night-men, who slept as they might by day, and spent the hours of darkness in emptying cesspools, were able, as a class, to claim a very low rate of mortality, their mode of life and the work in which they were engaged could not be unhealthy. A good deal of excitement, we remember, was produced by this delivery some forty years ago. It was forgotten that another point of view was possible, and that, in truth, none but the inured could live at all under such conditions! That since excogitated law, the "survival of the fittest," explains the result. So it is with members of parliament, busy counsel, and actors and actresses. The weakly and sensitive retire or die, or have the wit not to enter into a way of life which must obviously prove unsuitable. At the same time, we are quite prepared to meet our contemporary half way in his argument, though the inference with which he opens the debate is obviously faulty. We *do* think that a great deal of unpractical nonsense is talked and written on the conditions of health, and we are quite sensible of the fact that regimen and dieting may be pushed too far. It is true that "what is one man's meat is another man's poison." Practitioners and those who set themselves up as apostles of sanitary science are too prone to measure other people's corn by their own bushel. For example, a physician or surgeon may himself have been a too free liver—it is easier to preach than to practise,—and he may have become a total abstainer just in the nick of time, or with great advantage to his health; but this is certainly no reason why he should spend the remainder of his life in trying to persuade others that total abstinence is good or necessary for *them* also. Again, a medical man may have a miserably weak digestive faculty, and need to avoid certain dishes which other folk can take, not only with impunity, but with benefit; but that is no reason why he should go about abusing and interdicting the things that disagree with him, while they agree perfectly well with the majority of mankind. By pushing dieting to the verge of starvation, we are simply pretending to cure, not curing; we impose on ourselves and those who confide in our practice. In principle, the same is true of artificial modes of life. The matter is one which deserves professional attention.

THE LONDON SCHOOL BOARD AND "OVER-PRESSURE."

As a matter of course, School Boards will not take kindly to the discovery and exposure of the fact that a deadly wrong has been doing and is still done under their patronage. As well ask a criminal to form an impartial judgment of his own crime and to award a suitable sentence, as look to a School Board for a satisfactory vindication of the rights of common sense in education. There is a perfectly natural ring about the objection urged the other day at a meeting of the London School Board: "To appoint a special committee simply to satisfy one medical man was a thing that he (Sir Edmund Currie) could not conceive as coming within the province of the Board. If they agreed to the inquiry at all, he hoped it would be entrusted to persons who understood something about the matter—the School Management Committee." This is admirable; precisely what must have been expected. Meanwhile, may we not ask whether it is not just possible that some day—we know not when or how—a grain of intelligence may be discovered secreted in a stray official mind, and that the outrageous stupidity of talking like this may then become apparent? If some mal-practice were detected in the culinary department of Sir Edmund Currie's domestic establishment, would he refer the duty of "inquiring" to a committee of his kitchen maids, because they "understood something about the matter"? Why, that is the very reason of all others why the question should not be so referred. Not one medical person—though Dr. Crichton Browne is accepted as spokesman—but the whole profession demands inquiry and reform, and "the School Management Committee," which has so long failed to recognise the evil, is certainly not the body to which the duty of scrutiny or revision should be entrusted.

SUCCESSFUL EVACUATION OF THE FEMUR.

DR. TASSI presented a patient to the Academy of Medicine of Rome on May 25th last, on whom he had successfully operated for persistent osteomyelitis of the femur. The operative procedure was so formidable, and the result so satisfactory, that we translate Dr. Tassi's communication to his colleagues, with only a few immaterial omissions. The patient, a youth aged fourteen, from Aquila, of good constitution and parentage, first suffered two years previously from commencing osteitis of the internal femoral condyle. In the course of a few months the pathological process invaded the whole epiphysis, and an abscess formed at the lower opening of the Hunterian canal. On the patient's admission into the Ospedale S. Giacomo, on Jan. 8th, 1884, with acutely urgent symptoms of purulent osteomyelitis, free exit was given to a subperiosteal abscess, and two large drainage-tubes were introduced. The inflammatory symptoms having subsided, the patient was placed under chloroform on Feb. 4th, and the soft structures freely divided between the vastus internus and the ring in the adductors. A large chasm was then made in the internal condyle, and with the operator's spoon the interior of both condyles and of the whole epiphysis was evacuated as far as the peri-articular shell. It then became easy to evacuate the marrow and to scrape out the bone affected with osteomyelitis, purulent in some parts, fungous in others. The breach in the bone exceeded five inches in length. The cavity was washed out

immediately after the operation, and then filled with very fine iodoform. A plaster-of-Paris apparatus was then applied to the whole limb, leg and thigh included, and only removed once in the course of three months. When the lad was presented to the Academy the bone was wholly reproduced, there was no ankylosis, and he was in excellent health. Dr. Tassi added that he had at that time three similar cases in process of recovery in his wards in the Ospedale S. Giacomo.

SIR MOSES MONTEFIORE.

WELL done, Sir Moses Montefiore! It may now be hoped that we have heard the last of the opinion that in modern times no human life has been proved to reach 100 years. With the extending term of human life and the steady improvement in human habits, life has often seemed to reach 100 years and more. But this has not frequently been the case in persons whose history was so well known as that of Sir Moses Montefiore. He was born at Leghorn on Oct. 24th, 1784, whither his parents had gone on a business journey. His birth was duly entered in the books of the Spanish and Portuguese synagogues in Bevis Marks. It is a grand thing to live to 100 years and to be still cheerful and thankful. It is so, in the first place, for the pleasure of rebuking such sceptics as Sir George Cornewall Lewis, and in the second for the pleasure of giving all men proof that there is nothing in physiology to make it impossible for them to achieve a century of honourable and agreeable existence. We do not wish to magnify mere longevity, or to make every man believe that by any amount of thought he can necessarily attain to it. Our study of longevity leads us to think that it is generally a constitutional, and often a hereditary, matter. It is more important to live well than to live long.

"Nor love thy life, nor hate; but what thou livest
Live well; how long or short permit to Heaven."

It is in this spirit, and doubtless largely because of this spirit, that Sir Moses has attained to his 101st year. It should not be forgotten that in the last decade of it he accomplished no less a feat than a journey—the third he had made—to Palestine. And it is only by so "living well" that anyone is likely to attain to an enjoyable and unselfish old age. Living well in the vulgar sense of the word is one of the surest ways of failing of this achievement. There are a few men whose powers of vitality and whose integrity of tissue are so exceptional as to enable them to almost disregard the laws of health; and their survival to a high age often leads careless observers to wrong conclusions; but there is nothing more certain than that for Jew or Christian—and Sir Moses shows how much there may be in common between a good Jew and a good Christian—the great secret of longevity is to "live soberly, righteously, and godly."

SANITARY ARRANGEMENTS AT CAMBRIDGE.

WE publish elsewhere a letter from an undergraduate of Cambridge describing the accommodation afforded at a class of lodgings by no means unfrequently licensed for use by the junior members of the University. Within the last few years the numbers that annually enter at the University have increased out of all proportion to the residential capabilities of the colleges, in spite of the new buildings that many of them have recently erected. The demand for lodging-house accommodation has therefore considerably increased, and many small tenements that a few years ago would have been considered altogether unfitted for the purpose are now eagerly sought in order to lodge the surplus undergraduates. To this there would be no objection if these buildings were kept under strict sanitary supervision, which we regret to say is not the case. Our Commissioners, who have visited the town, can bear out the statement made in the present letter with regard to the position of many of the waterclosets in relation to the kitchens, living rooms, and bedrooms. Many of these closets are utterly without provision for ventilation, and often with a very inadequate water-supply. And the danger from this source is aggravated at Cambridge by the fact that the town drainage is in an unsatisfactory condition, and that dangerous pressure of sewer gas, and sometimes actual outburst of sewage, occur at weak points in the system. Of course, so long as the inspection of these lodging-houses is entrusted to a clergyman, we cannot expect it to be efficient from a sanitary point of view. It is quite right that a clergyman should be appointed to inquire into the moral atmosphere of undergraduates' lodgings, but there ought to be associated with him an efficient sanitary inspector to attend to more practical matters. No licence should be granted to any house for the reception of students unless it can be shown that it is protected from the town sewers by an efficient trap, that every closet in it is ventilated and abundantly supplied with water, and that all waste-pipes &c. are disconnected from the house-drains; whilst the licence should be countersigned at least twice every term to show that all the arrangements have been kept in working order, and that no overcrowding has been permitted. Such an arrangement as that described by our correspondent might have been possible at Cambridge during the Middle Ages; indeed it reads like one of Chaucer's tales, but is revolting in the extreme to our modern notions of propriety. We sincerely hope the University authorities will earnestly bestir themselves in this matter. It is not the first time that complaints have been forwarded to us by undergraduates of the insanitary conditions in which they are forced to live. There is no reason why the University of Cambridge should lag behind the University of Oxford in the excellent supervision of lodging-houses by a skilled sanitary inspector, aided by a staff of efficient assistants, like that in force at the latter place. The cost of such a system, which might be met by a small increase in the rent of each house, would, we are sure, be gladly paid by the parents of the undergraduates whose health and comfort would be thus largely promoted.

GAME FOR HOSPITALS AND INFIRMARIES.

SUCCESS in the treatment of disease, as every physician knows, depends greatly on efficient feeding. At times the maintenance of strength may even become the first consideration, until, it may be, some uncertain crisis has been passed and time is gained to secure the action of needful remedies. An important object in hospital dietetics, and one often difficult to attain, is variety. Without it, the most nutritious fare may fail to realise its purpose because it does not tempt the palate of the invalid or does not sufficiently stimulate his weak digestive function. Much can be done, no doubt, to obviate this defect by skill in choosing and preparing foods in common use; but nature has other resources which a little thought can render still more highly serviceable. Game supplies the want almost without contrivance. It is agreeable, unusual, delicate, and digestible. With its many forms, its native flavour, and its different possibilities of preparation, it provides a relief from the daily routine of bedside cookery which is for many as wholesome as it is certain of appreciation. We are convinced that most of those who as sportsmen are now using the gun and rifle for seasonable diversion require no further hint to remind them of the claims of the sick in hospitals and infirmaries, who have not their advantages of recreation, but whose indigent ill-health entitles them in all true charity to a share in its results.

THE COMBINATION OF THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THERE are 200 candidates for the first examination of the College of Physicians at this moment, while over fifty passed the third or final examination a few days ago. We do not know what proportion of these fifty took the surgical examination at the College of Physicians; but there is no doubt that students and teachers are at last recognising the fact that the licence of the Royal College of Physicians of London is a *complete* qualification in medicine, midwifery, and *surgery*. This being so, it is surely most unjust to compel the student of the future to pay thirty-five guineas for a complete London qualification when one can now be obtained for fifteen. Had the College of Physicians kept in mind the proverb "Tout vient à qui sait attendre," there would have been no inducement—not even a pecuniary one—to tempt them into the unwise scheme of combining with the College of Surgeons to hold a complete examination.

TOXIC ALKALOIDS IN THE URINE.

THE presence of toxic alkaloids in the urine, and in certain pathological liquids, has been studied by MM. Pouchet, Selmi, Bouchard, and more recently by MM. Lepine and Guérin. Alkaloids were discovered and separated from the urine in two cases of typhoid fever. When the alkaloids were injected into the lymphatic sac of frogs death followed, and the heart was observed to beat slowly before, and to be large after, death. When the alkaloids derived from the urine of pneumonic patients were injected into the lymph sac of a frog, the heart ceased to act in the systolic period, but without previous slowing of its rhythm. It appeared to be true that the urine of patients suffering severely from typhoid fever contained more alkaloid than a similar quantity of urine from a patient suffering from a slighter attack. In one of the cases of pneumonia it was discovered that the urine on the day after defervescence contained but little alkaloid, and this was not of toxic nature, whereas two days before the urine contained much poisonous alkaloid. These recent researches confirm the statement of M. Bouchard that the urinary alkaloids undergo augmentation in certain acute diseases. It was also proved that liquid extracts from the cadaver do not necessarily hold toxic alkaloids in solution.

SUSPICIOUS CASE OF DEATH FROM DROWNING.

ON the 16th ult. the Liverpool borough coroner resumed and concluded a twice adjourned inquest on the body of a girl aged thirteen, which had been taken out of the Leeds and Liverpool canal on Sept. 17th last. The following facts were disclosed at the several adjournments:—The deceased was last seen alive at 7 P.M. on Sept. 16th near a canal barge on which she had been working, and also near the spot where her body was found. It was proved that about a fortnight before her death she had made indecent overtures to a passing "flatman," though beyond this no evidence of immorality was forthcoming. As she did not return home that night, inquiry was made for her on board the flat where she had been employed, but the flatman denied her presence on board. On the next day (the 17th) her body was found floating in the canal just outside some lock gates. The body was perfectly naked, and both legs were severely injured, being smashed through the middle third of each, the wound involving the whole circumference of each, except a small posterior portion, and both bones being fractured. A post-mortem examination was made on the following day by Mr. R. W. Lowndes, surgeon to the police, who found that the cause of death was asphyxia from drowning. From the appearance of the legs, and the congested state of the internal organs, he concluded that the injuries had been caused after death. He also found the vagina so much dilated as to suggest that some violence had been done, though the immersion would tend to remove any blood stains or seminal fluid. A week after the discovery of the body some of her clothes were found in a basin fifteen yards from where the body was found. They consisted of a jacket and the skirt of a dress, but there was no under-clothing, though the mother deposed to her daughter having some on the day she was missed. The jury returned an open verdict. The clothes were carefully examined by Mr. Edward Davies, analyst of the Liverpool Royal Institution, but nothing was found tending to throw any light on the case, which remains shrouded in mystery.

CLEARING A TRACHEOTOMY TUBE.

THE sad death of Dr. Rabbeth has led to numerous suggestions of mechanical contrivances for clearing tracheotomy tubes of obstructing fluids and membranes. It is sufficiently evident to the practical surgeon and physician that most of the inventors have no idea of the calibre of a child's trachea, of the form of the tracheotomy tube that is usually inserted, or of the nature of a diphtheritic membrane. Suggestions of a pipette through which to draw the membrane, or of a kitchen bellows as a suction machine (as described in a letter from a correspondent), show a complete ignorance of the problem to be solved. A child is in danger of immediate suffocation, the membrane is thick and adhesive, and generally extends into the large bronchi, if not into the smaller divisions of those tubes. Any instrument which will obviate the necessity of sucking out the tube must be always at hand; readily applied to the tracheotomy tube, whatever differences there may be in the bore of various specimens; it must be of sufficient suction power and easily worked; and, lastly, of such a form as can be used whilst the tracheotomy tube is *in situ*. None of the suggestions recently made meet these essentials, and many are simply ridiculous. In our opinion there must be some change in the shape of the ordinary tracheotomy tube before any contrivance can be adopted which, in an emergency, would so effectually dislodge its contents, or the obstruction in the air-passages beyond it, as the ready but dangerous means resorted to by Dr. Rabbeth.

CERTIFYING INSANITY.

THE whole process of certifying insanity is so needless and mischievous in its effects and consequences, and the law controlling the practice is so defective, that complications from perverseness, blundering, or neglect are purely wanton. At Birmingham they seem to have a free and easy way in certifying the insane. Magistrates do as they please about calling to their assistance a medical man. Doubtless they feel fully competent to manage the business themselves, and being possessed with this idea, they either omit the part to be played by "the doctor" in the little drama, or they leave him to come on the scene how and when he can. A coroner has just rebuked the local justices for their irregularities in this respect, and they most richly deserve the censure passed upon them. It is intolerable that poor folk should be hurried into asylums on a mere perfunctory examination made by medical men who act together, if not technically in "collusion"; but it is much worse if a totally unskilled official, such as a magistrate, is to call to see an alleged lunatic, ask two or three common-place questions, and of his own untrained and unguided judgment certify the subject of this brief ineffectual scrutiny insane. If magistrates who are to keep the medical men in order themselves do such things, *quis custodiet ipsos custodes?*

PARLIAMENTARY REPRESENTATION OF THE UNIVERSITIES OF EDINBURGH AND ST. ANDREWS.

WE have received the report of a meeting of electors who had signed a requisition to J. H. A. Macdonald, Esq., Q.C., LL.D., Dean of Faculty, to allow himself to be nominated as a candidate to represent the Universities in Parliament. The meeting was held on the 22nd ult. The chairman, Dr. John Duncan, spoke apologetically of the fact that the Conservatives had not brought forward a medical candidate for a constituency so largely medical. His reasons were that no medical man financially sufficiently prosperous, and professionally sufficiently unsuccessful, could be found to take the post. This explanation is very unsatisfactory. For ourselves we cannot pretend to any enthusiasm in connexion with the candidature of Mr. Macdonald. One great objection to his election is that he is a lawyer, and there are already far too many men of that profession in Parliament. Their number is a misfortune for the country and for the legal profession itself. Another objection is his laudation of the medical examining system in Scotland, even that of the Corporations. He cannot have read the report of the Royal Commissioners or the evidence accompanying it, or he would not have spoken so complacently of the perfection of the work of these bodies. But what will not men say for a seat in Parliament? It is no slight satire on the choice of a lawyer for this office, who has his own views in going into Parliament, to notice that half his speech was taken up with medical questions and medical politics, on which it is evident he is just as ready to mislead the House as Sir Lyon Playfair, whom he seeks to displace. We cannot pretend, after the wreck of medical legislation brought about by Sir Lyon, to weep over any prospect of his displacement. We can only lament that the Scotch universities have no better or wiser friends than those who dare not speak of them but in terms of flattery, and who think so slightingly of their graduation system as to show a dread of public and independent tests. Time will show who are the best friends of the Scotch universities, and whether their recent action is wise.

THE SOCIAL LIFE OF THE MEDICAL STUDENT IN LONDON.

A LETTER in a daily contemporary has drawn attention to the absence of many social advantages in the life of the medical student who is compelled to live in London and other large cities. The crude idea is brought forward that, in the absence of attention being paid to the necessity of providing social comforts and proper amusements for the future doctor, Mr. Mundella and the State should step in and interfere. We think that Mr. Mundella has had such sufficient experience in legislating for the fully-fledged doctor that he is not likely to rashly interfere with the everyday life of the student. If life in a large city like London is, as we contend, the best provision, if not a necessity, for the after-practice of his profession, the medical student must perforce reside in close proximity to his daily work; and sighs after proctors, academic life, and collegiate discipline are in vain and out of place. Of what real use to discipline and morals are proctors' visits in our university cities? and the idea of such futile and antiquated methods for regulating a student's life in London is too ridiculous to be seriously argued. In some schools—King's College and St. Bartholomew's—rooms under the supervision of the authorities are provided for a certain number of medical students, and it would be well if the other medical schools also adopted this arrangement. Parents would then have room for choice in regard to a residence for their sons; but beyond this, in a city like London, it is questionable whether any other social surroundings could be secured, and even whether they would be advisable. However much it may be regretted, the hard lesson must be learnt by the parents of every medical student, that in leaving home for the metropolis social comforts must be exchanged for hard work, and self-reliance must take the place of parental or academic supervision. The study of practical medicine and surgery cannot be pursued except in great cities, and the pupil should have been prepared in early life to withstand their special temptations. The idea of a centralised block of buildings for medical students is a very old one, and has frequently been brought to our notice, but there are numerous objections, financial and otherwise, to such a scheme.

PEPTONURIA.

AMONG those observers who have closely studied the subject of peptonuria M. Grocco Pietro stands conspicuous. The conclusions at which this physician has arrived deserve considerable attention. Peptonuria is said to be a sign of disease, and to have no clinical relationship with albuminuria. It may be a symptom of general or local, infective or non-infective, disease. Malarial fevers, typhoid fever, scurvy, purpura hæmorrhagica, septicæmia, and acute phosphorus poisoning may be attended with peptonuria. Local morbid processes which produce this sign are nearly always inflammatory affections tending to the formation of pus. Some cases of rapidly increasing morbid growths are accompanied by this symptom. When a local disease is associated with peptonuria it is considered likely that the peptones are formed at the seat of mischief, and that they appear in the urine after absorption into the blood. In general diseases the genesis of peptonuria is still unknown. It is possible that peptonuria may decide between the presence of a simple and purulent inflammation. Peptonuria is frequent at the period of resolution of cases of lobar pneumonia; it may be observed during the period of grey hepatisation.

EXTRACTS OF MEAT.

A CARD and handbill concerning a certain extract of meat have been forwarded to us by a gentleman to whom they were given at the Health Exhibition by the agent connected with the business. The statements contained in both are open to objection. The card tells us that "1 lb. of the extract contains as much nourishment as 40 lb. of fresh beef." Now this is a statement likely to mislead the public, to cause much mischief, and even in some cases to lead to fatal results. As is well known, the various extracts of meat do not represent beef-tea as made from fresh beef at all; that is to say, the extract does not possess the natural fatty matters of the flesh, nor any of the proteid elements, albumen, myosin, gelatine, and the like; which latter fact is shown by their not being converted into peptones when digested with artificial gastric juice, and by their solutions not gelatinising when cold, as good home-made beef-tea should do. Extract of meat, as its name implies, consists almost entirely of the extractive matters of the flesh—matters yielded by the changes taking place in the tissue itself. The only advantage of these extracts is that, being taken in a concentrated form, these extractive matters, which are extremely soluble, pass readily into the blood, and by undergoing a further downward change, as from kreatine, uric acid, &c., into urea, and from inosite into grape sugar, furnish a certain degree of force, and so act as an immediate stimulant. But they must not be regarded in the light of food; indeed, it has been shown experimentally that dogs fed entirely on extract of meat die sooner than dogs which are kept without food altogether! This is accounted for chiefly by the excess of potash salts these extracts contain. It is therefore very wrong so to advertise these extracts to the uninstructed

public as to mislead them into thinking that they "contain as much nourishment as fresh beef." The well-known Liebig Extract of Meat Company are very clear in their statement that 1 lb. of their extract requires for its production 34 lb. of lean meat, a very different thing from saying that 1 lb. of the extract "contains as much nourishment as so many pounds of beef." Moreover, they are particular to state that their extract does not contain either fat, albumen, or gelatin. We are surprised that the authorities should have allowed such a card and handbill as that complained of to be distributed at the Health Exhibition, and thus acquire in the eyes of the public a certain degree of authorisation; whilst, in the interests of the public, we hope that in any future similar Exhibition steps will be taken to prevent traders from misleading purchasers as to the nutritive value of extract of meat.

HOSPITAL SATURDAY FUND.

UP to the present time the Board of the Hospital Saturday Fund do not see their way clear to distribute more than £9000—that is, £750 over the amount collected last year. They expect, however, £1000 more to come in. The street collection of the central districts alone amounted to £1900. The day, it will be remembered, was unfortunately wet. So this result may be considered as not unsatisfactory. But the workshop collection must still be regarded as entirely disproportionate to the means, and even the duty, of the working classes of London. And it ought to be the chief care of the Committee between now and next year's collection to develop a system of regular contributions to the Fund in every establishment. The managers of the Fund have come into collision with the Charity Organisation Society. This Society is nothing if it is not critical. It has been exercising its critical faculty on cases recommended by the collectors to the Fund. The managers resent this, and deny the right of the Society to inquire into cases recommended by them. They moreover deny the right of any Charity receiving its awards to refer cases to be investigated by the Charity Organisation Society. And they aver that their collectors, either as employers, foremen, or fellow-workmen, are more familiar with the needs and fitness of applicants than the agents of the Society can be. We have always admired the somewhat bellicose and ambitious attitude of the Fund, notwithstanding the modest dimensions of its contributions. We trust that while declining the critical services of the Society, it will not fail to use its letters with discrimination.

CASE OF THE DARENTH SMALL-POX CAMP.

THE owner of an estate in the vicinity of the Darenth small-pox camp and the Metropolitan Asylums Board have been preparing for many months for a trial which bids fair to take high rank amongst cases of a similar sort which have come before our legal tribunals. The plaintiff will contend that the camp is a source of nuisance and danger to him, and the Asylums Board will argue to the contrary. Both sides will provide abundant, and so-called skilled, evidence, and it is to be hoped that in some way or other a decision will be arrived at which will form a basis for the future action of those whose duty it is to provide for the isolation of small-pox cases. The subject is by no means a new one; but the circumstances which are now involved are exceptional. Mr. Power's now famous report went to show that whilst the aggregation of a certain number of acute small-pox cases led to a diffusion of the disease to the surrounding community, no such result followed on a much larger aggregation of convalescents. Now, Darenth camp has been essentially established for convalescents, and though at the first onset, and before the *Castalia* was ready, its use was by no means limited to such cases, yet it is the fixed intention of the Asylums Board only to send to it such cases as are either convalescent or not severe. If the cases were to be limited to convalescents the case might be less involved than it bids fair to be; but the mingling with the convalescents of cases which, though mild at the date of their removal, are in reality acute ones, introduces an entirely new element into the case. It has never yet been shown whether any distinction can be drawn, in so far as diffusion of infection is concerned, between severely acute and mildly acute cases of small-pox; neither is there any evidence procurable to show whether such huge aggregations of convalescents as are contemplated at Darenth would lead to a different result from that which was found to follow on the comparatively limited aggregation of such cases which took place at Fulham. The whole subject is a very obscure one; large interests are involved; and it is to be hoped that, when the case for injunction comes before the Court of Chancery, the medical evidence to be brought forward will be such as the importance of the case demands.

"A GREAT MEDICAL REFORMER."

IN the *Asclepiad* for October appears an article by Dr. B. W. Richardson which possesses exceptional interest for us—and we venture to hope for all readers of this journal—its subject being the founder and original Editor of THE LANCET. Under the heading "A Great Medical Reformer Thomas Wakley, M.P.: a Personal Recollection and Tribute,' Dr. Richardson gives an appreciative, kindly, and pleasantly chatty account of his acquaintance with and personal recollection of the late Mr. Wakley, and subscribes a tribute to his more public and better known acts in his capacity as a Member of Parliament, as coroner for Middlesex, and as Editor of this journal. The article is accompanied by a plate taken from a bust of Mr. Wakley.

AFTER-CARE FOR THE INSANE.

THE need of special homes for the convalescent patients discharged from public asylums, where they can be prepared for their return to the world, has been long felt. Sir William Ellis first pointed it out nearly fifty years ago; and yet nothing has been done to satisfy the admitted necessity. The After-Care Association has now been formed for the inauguration of this good work on a satisfactory basis. We heartily wish the enterprise success. It is one in which the profession must be interested, and which deserves its confidence and help. We only wish the idea could be so expanded that homes of refuge for those who, there is too much reason to fear, are on their way *into* asylums, as well as those who are on their way out, could be comprised in the scheme. The provision of such homes is, we are convinced, the one, and only, permanent solution of the problem how to arrest the development of mental disease, by establishing places of rest and treatment for those who are crossing the borderland, whether to or from the territory of mind darkness and despair.

THE SUNDERLAND MISERY.

THE distress in Sunderland is lamentable, and needs much more than the off-hand subscription of a £5 note by true friends of the poor. It is real and widespread, and must be relieved. But it will be a further misfortune if some light is not thrown on its cause. Sunderland up to a very recent period was one of the most thriving and prosperous towns in England. The disastrous inflation of the steamship-building business, which has brought such bad times to sailors and shipowners, brought high wages and plenty of work to Sunderland workmen. Yet, on the very morrow of a reverse, the well-to-do and prosperous workmen

appear before the country *in formâ pauperis*, without savings, and even without food. It is really time that this oft-repeated phenomenon should be thoroughly investigated and explained. We commend the subject to the Lord Mayor's attention. If he will deal faithfully with it, he will not only do good to the men of Sunderland, but to the country at large. These violent oscillations of the social pendulum are truly discreditable, not only to workmen, but to those who give a false impetus to industry, only eventually to leave all affected impoverished or ruined. The blame ought to be fairly distributed. Drink and improvidence will need to be fearlessly and faithfully exposed, if they are the real or chief factors in this Sunderland misery. But commercial gambling and mad haste to be rich ought not to escape. It will be well for the country when it wakes from the dreams of political excitement and learns the value of steady work, thrift, temperance, and commercial sobriety and integrity. Statesmen are not without their responsibilities for these crises of misfortune, though Mr. Gladstone is not without some justification in his remarkable answer to Mr. Gourley's question on this subject.

PERIODICITY IN ANIMAL LIFE ASSOCIATED WITH LUNAR PHASES.

THE annual report of the Board of Regents of the Smithsonian Institution for the present year gives an account of a remarkable worm known to the natives of the Fiji Islands by the name of Mbalolo, but to naturalists under the name of Salolo viridis. It is an annelid related to the Nereids, scientifically described by Dr. J. D. Macdonald in 1857. It is found in certain of the coral archipelagos of the Pacific, Samoa, Viti, and the Gilbert group. The Fijian name has reference to the coincidence of its movements with the moon; and when the worm makes its appearance it does so in such vast numbers that it is collected by the natives as a dainty article of food, and is so much prized that formal presents of it are often sent considerable distances to chiefs of other districts which are not favoured by the worm. The worms only make their appearance to spawn, and the time of their appearance is the day of the last quartering of the moon in October, unless that falls at the beginning of the month, in which case there will intervene another lunar month. According to Mr. Powell, there is a second appearance of Salolo each year, occurring a month after the first, consisting of such worms, probably, as were not sufficiently mature to spawn in October, or it may be of another species.

MILK AS A VEHICLE OF DISEASE.

IN his recently published annual report Mr. Shirley Murphy recalls the incidence of the serious prevalence of enteric fever which, in 1883, so widely affected the district of St. Pancras, and he points out how necessary it is, in the interests both of milk vendors and milk consumers, that the former should be required so to keep their books that it would be possible at a glance to tell whether infectious illness occurring in any special neighbourhood were related to milk received from one farm or another. We believe that something of this sort could, without much difficulty, be enforced under a revised Dairies, Cowsheds, and Milkshops Order, and as to the need of it we have no doubt whatever. There are large dairies that now supply London in such a way that the milk-supply to any one district is intentionally brought on one day from one farm, on the next from another; and this system of "sandwiching" the districts, whatever its real object may be, is certainly such as almost absolutely to defeat any attempt to discover the actual source of an infection the incubation period of which is apt to vary somewhat. The matter is well worth the attention of those who are responsible for the preparation of dairy orders.

"DEATH FROM INANITION."

WE have been favoured with some correspondence that has passed between the Registrar-General and Mr. W. G. Groves, of Woodford, Essex, concerning the use of indefinite terms in the filling-up of death certificates. The Registrar-General, whilst expressing regret that such words as atrophy and debility, &c., should be generally employed by medical men, does not see his way to interfere with the registration of certificates in which those words occur. With regard to the term "inanition," it would appear that Mr. Groves takes too exclusive a view of its application when he supposes that it is synonymous with "starvation," which to our mind carries a much stronger meaning. But even the latter term is often read in its physiological sense as signifying deprivation of nutritive matter, be it by illegal practices or through the medium of "natural causes.' The fact of a practitioner delivering a certificate of "death from inanition" to the friends of a deceased person implies that he has no suspicion of foul play, because otherwise, as Mr. Groves contended, he would be offering an inducement and a cloak to crime. If all such certificates were referred by the district registrar or the Registrar-General to the coroner for investigation, we fear unnecessary trouble and expense would be incurred. Nevertheless, we entirely agree with our correspondent that it is the duty of medical men to express their opinions in unambiguous language in all cases where they have no doubt as to the grounds of their belief, and we trust that ere long unscientific phrases like "general marasmus" and "death from the visitation of God" will have vanished from the nomenclature of mortality.

ITALIAN NOTES.

A CREMATION SOCIETY has just been established at Perugia, under the presidency of Dr. Gaetano Tancetti.

Splenectomy was performed, on the 14th ult., in the hospital at Padua, by Dr. Alessio Giovanni. The patient, a woman aged forty, was affected with extreme anæmia and chronic hypertrophy of the spleen. According to the *Gazzetta degli Ospitali*, the operation was unattended with complications, and was well borne by the patient, who continued in a satisfactory state seventy-two hours afterwards.

With becoming irony, a triumph of quarantine and red tape is recorded by the *International Review of Medicine and Surgery*, published at Naples under the editorship of Professor Antonio Raffaele. Two waggons laden with chloride of lime and carbolic acid, in their passage from Switzerland into Italy, were stopped at Chiasso, a station of the sanitary cordon. Peremptory orders had been issued that all imports should be disinfected, and the officials could make no exceptions. It is not stated whether they carried out their instructions by mixing the two loads.

WATER FAMINES.

THE long-continued drought has seriously affected the water-supply in many parts of the kingdom. It is not long since Northampton was announced as being in great straits. In numberless places the supply is short, and where surface wells are relied on people have to travel long distances in order to secure enough water for the most pressing domestic purposes. Manchester and Bradford have been threatened with a water famine. The case of Bradford seemed until within the last few days especially urgent. As regards Manchester, the beautiful series of storage lakes in the Longdendale valley had received no fresh supplies from the hill-sides for some months past before the descent of the recent showers. The amount of "compensation water," which usually has to be given before the city can be supplied, runs away with a large portion of the limited supply that is available.

When the amount of compensation water was originally decided on, one of the principal objects to be attained was the maintenance of such a supply in the local streams as would secure to manufacturers using water as a motive power all the rights they had hitherto possessed. Although there are, doubtless, other points to be considered in this connexion, yet it is notorious that steam has in many places taken the place of water for the purposes of manufactures, and it would seem right that in so far as compensation water was only required for the purposes of machinery, some deduction in the amount demanded should follow on the use of steam.

MEDICAL REPRESENTATION IN PARLIAMENT.

A COMMITTEE of the Association of Members of the Royal College of Surgeons has resolved to request the Prime Minister to include in his new Franchise Bill a scheme for giving two Parliamentary Representatives to the registered medical practitioners of Great Britain and Ireland. We heartily wish success to this petition. But we are scarcely sanguine about it. The present humour of Parliament is for the rough addition of millions to the representation, not the addition of the representatives of classes. We cannot expect that this rough process will produce the most satisfactory results without some complementary franchises, amongst which such a proposal as that of the Association would deserve favourable consideration.

THE ISLINGTON MEDICAL SOCIETY.

ON Tuesday evening the session of the Islington Medical Society was opened auspiciously at the house of Mr. Wm. Cattlin, Highbury-place, with the reading of a paper on the Scientific Basis of Therapeutics, by Dr. Mitchell Bruce. The author was very happy in his exposition of the natural efforts of the body towards the throwing off and counteraction of disease, and in showing the action of remedies which have been indicated by a consideration of these efforts and a desire to imitate them. In the discussion which followed, Dr. Stokes expressed the gratification he experienced in seeing a modern physician devoting his mind to therapeutics, which he thought was too often neglected in favour of mere morbid anatomy. After a vote of sympathy with Mr. Cattlin, sen., and an expression of satisfaction at his improved health, the meeting separated.

INFECTIVE OSTEOMYELITIS.

La France Médicale says: "Les microbes continuent à pulluler. C'est le tour aujourd'hui du microbe spécifique de l'ostéomyelite infectieuse." M. Rodet has found that when the micrococci of the pus in cases of osteomyelitis are injected into the venous system of rabbits, and therefore free to choose their seat, they show a marked preference for the bones, and more especially for those parts which are in process of active growth, where they set up a severe suppurative or necrotic form of osteitis analogous to osteomyelitis in man.

THE DEFENCE OF THE DEFENCELESS.

ON Monday afternoon last the Lord Mayor opened a shelter for children at 7, Harpur-street, Theobald's-road, Holborn, belonging to the recently formed London Society for the Prevention of Cruelty to Children. We are by no means advocates of the indiscriminate formation of "Societies," and earnestly deprecate any undue interference between parents and their children. None the less heartily do we congratulate London on following the admirable example of Liverpool, Manchester, and Glasgow. The statement of one of the hon. secretaries—that since the formation of the Society in July last its attention had been called to 36 cases of starvation, resulting in fearful suffering and emaciation, and in eight cases resulting in death; to 51 cases of desertion; to 14 cases of infliction of wanton pain; and to 51 others the character of some of which could not be described—sufficiently demonstrates the *raison d'être* of such a Society. Such names as those of the Baroness Burdett-Coutts, the Earl of Shaftesbury, and Cardinal Manning afford ample guarantee of honest intention and strenuous endeavour on behalf of the defenceless.

CURABILITY OF SYPHILITIC ARTERITIS.

M. LEUDET has recently related the case of a man, the subject of syphilitic infection, who was noticed to have undergone a decided alteration in mental behaviour, to have lost memory, and to have suffered from frontal headache. Whilst these symptoms prevailed the superficial branch of the left temporal artery was seen to have become much thickened, so as to feel like a hard cord, and twice its normal diameter. Seven months later the corresponding vessel on the right side became affected in the same way, and coincidently the cerebral symptoms increased in intensity. The administration of antisyphilitic treatment was followed by the return of the affected arteries to their natural state, and by the recovery of the patient.

OXFORD GRADUATES' MEDICAL CLUB.

THIS club, which was so successfully launched during the summer of the present year, has announced the intention of holding its second gathering on Thursday, November 20th, when a dinner will take place at Limmer's Hotel. Each member is to be allowed to bring one guest, who must be a member of one of the Universities of Oxford or Cambridge. It is to be hoped that this movement will receive cordial support from all members of the profession who have an Oxford degree. The secretaries are Dr. Samuel West and Mr. John H. Morgan.

SMALL-POX IN DURHAM.

THE remarks of our Newcastle-on-Tyne correspondent in our annotation last week had reference to the prevalence of small-pox in the city of Durham, and not in Newcastle, as might have been supposed from the omission of the heading Durham. Our correspondent informs us at the same time that the disease continues to spread in the city of Durham and the neighbouring villages.

HYGIENE IN PARIS.

THE meeting of the Académie des Sciences, held on October 14th, was chiefly occupied with the reading of papers by MM. Gautier and Marey. The first related to a report on a further supply of pure water and on the sewerage of Paris. The second was concerned with the question of the propagation of cholera by means of drinking water.

BIRMINGHAM HOSPITAL SUNDAY.

OUR Birmingham correspondent telegraphs that the collections on Hospital Sunday in the town have this year amounted to £4262 5s., a sum decidedly less than that collected last year.

TWENTY medical practitioners have died in Naples, out of 139 engaged in attending cholera patients, under the White Cross Society, during the recent epidemic.

DR. P. GRAWITZ, Chief Assistant at the Pathological Institute of Berlin, has been invited to act for Professor Grohe of Greifswald, who is seriously ill.

THE resignation by Dr. Herbert C. Major of the post of Director of the West Riding Asylum cannot fail to be a grave loss to that institution. During his many years' tenure of office, in which he was preceded by Dr. Crichton Browne, Dr. Major has persistently and successfully endeavoured to further the humane and intelligent treatment of the insane, and, by his individual efforts in varied histological research, has contributed much to the advancement of neurological science. We trust that his retirement from official cares may afford him leisure for further work in this ever widening field.

AT a special meeting of the Alnwick Local Board on the 16th ult., held to consider and discuss the medical officer's report, a member moved that the report be sent back to be condensed, and that the medical officer state what he had to state in as simple a manner as possible, refraining from filling his reports with voluminous grandmotherly advice. In place, however, of this motion being carried, another, to the effect that Dr. Davidson be granted a vote of thanks for the excellence of his report, was carried *nem. con.*

AT the fifteenth annual conference of the Poor-law authorities of the South-Eastern district of England on the 27th ult., a discussion was held on "the administration of the laws relating to public health and the management of highways by rural sanitary authorities." At the conclusion a resolution was adopted to the effect that the management of highways by rural sanitary authorities works well, and and might with advantage be extended.

THE following appointments at the University of Cambridge are announced:—Dr. Donald MacAlister, to be the University Lecturer in Medicine; Dr. Robert Nicholls Ingle, to be the University Lecturer in Midwifery; Dr. Bushell Anningson, to be the University Lecturer in Medical Jurisprudence.

THE University of Kiew (Russia) celebrated the fiftieth year of its foundation on Sept. 20th and 21st. Many foreign *savants* received honorary degrees; and MM. Charcot and Pasteur were present as representatives of France.

AT Lésignan (Aude) some families showed symptoms of poisoning, which were proved to have been caused by eating salads grown in vineyards treated with chemical products, which had been employed against the phylloxera.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE recommendations explain themselves. They are evidently designed by those who have drawn them up to make the Council more representative of the Fellows and Members, and more accountable to them; to increase the dignity of the office of President; to quicken the interest of the Fellows and Members in the affairs and administration of the College, and, at the same time, to augment the control of the members of the body corporate over the conduct and destiny of the College. It is to be earnestly hoped that the Fellows generally will give a hearty and liberal support to the proposals of the Association, for time and circumstance call for prompt and vigorous action.

RECOMMENDATIONS AND ALTERATIONS PROPOSED TO BE INCLUDED IN A NEW CHARTER OF THE COLLEGE.

The following recommendations have been drawn up by a subcommittee of the Association, and having received the approval of the General Committee will be submitted to a general meeting of the Association of Fellows, to be held on Saturday, Nov. 8th, at 4 P.M., at the Medical Society's rooms, Chandos-street, Cavendish-square, W.

I. *Respecting the Conditions of Eligibility of Fellows to be Members of Council.*—Recommended: (*a*) That subject to such limitations of standing as Fellow or Member as defined in Section 7 of the Charter, Vict. 15, any Fellow of the College shall be eligible to be a Member of Council. (*b*) Should any Member of Council other than the President be absent from more than two successive quarterly meetings, or from more than four successive ordinary meetings, he shall thereupon cease to be a Member of the Council, unless a reason for such absence satisfactory to the Council be assigned. (*c*) That not more than one-half of the Members of the Court of Examiners, and not more than two Members of the Board of Examiners in Anatomy and Physiology, shall have seats in the Council. (*d*) If any Fellow who is also a Member of the Court or of the Board of Examiners shall be elected into the Council, he shall, within a period of two months of such election, vacate his office as a Member of the Court or of the Board.

II. *Respecting the Conditions of Candidature of Fellows for the Council.*—Recommended: That Section 9 of Charter 15 Vict. do read as follows:—That every Fellow who shall intend to offer himself as a candidate for a seat on the Council of the said College shall, within such time as the Council shall from time to time direct from the publication of the *London Gazette*, in which the day of election shall be announced, transmit or deliver to the Secretary of the same College a notice signed by himself of such his intention.

III. *Respecting the Condition and Term of Tenure of the same Office.*—Recommended: (*a*) That the six Members of the Council, who shall have served longest on the Council without re-election, shall vacate their office every year instead of three, as provided for by Section 12 of Charter 7th Vict.

IV. *Respecting Substitute Members.*—Recommended: (*b*) That "Substitute Members," as defined by Section 14, Charter 7th Vict., be abolished.

V. *Respecting the Mode of Voting.*—Approved: The proposed alteration in the Section 15 of 7th Vict., abolishing compulsory personal voting, and permitting the alternative of voting by voting paper.

VI. *Respecting Payment of Fees by Members of Council.*—Recommended: The payment of a fee by a Member of the Council be no longer required.

VII. *Respecting the Election and Tenure of Office of President.*—Recommended: That the President of the College be elected annually by the Fellows from among the existing or past Members of the Council at the time, in the manner and under the conditions hereinafter described:—(*a*) That he be elected at the time and in the manner that Members of the Council are elected, on the nomination of the Council. (*b*) That the Council shall submit at least three names to the Fellows, one of which shall be that of the retiring President, provided he be eligible and does not decline to serve. (*c*) That no one shall hold the office of President for a longer period than five consecutive years. (*d*) If the President be elected from amongst the past Members of the Council, he shall become *ex-officio* a Member of the Council during his tenure of office as President.

VIII. *Respecting the Office of Treasurer.*—Recommended: (*a*) That a Treasurer be appointed from amongst the Members of the Council, and that his accounts be audited by a profesional auditor, whose report shall be submitted to the annual meeting of Fellows and Members. (*b*) That the Treasurer's balance-sheet, duly audited, shall be submitted to the annual general meeting of Fellows and Members, and that such balance-sheet shall be published with the advertisements convening such meeting.

IX. *Respecting the Constitution of the Court of Examiners.*—Recommended: (*a*) That Members of the Court of Examiners shall be elected annually, and that no Member of the Court of Examiners shall hold office for more than five consecutive years. At the expiration of this time he shall not be again eligible until after a period of two years has elapsed. (*b*) That all vacancies in the Court of Examiners shall be advertised in at least two of the weekly medical journals of the United Kingdom, with an announcement of the names of those members of the Court who are eligible for re-election, and inviting Fellows desirous of being considered candidates to send in their names to the President. (*c*) That Section VIII. (3) of the Bye-laws requiring the

payment of a fee of twenty guineas by a person elected a member of the Court of Examiners be omitted.

X. *Respecting the Board of Examiners in Anatomy and Physiology.*—Recommended: That Members of the Board of Examiners shall be elected annually from amongst the Fellows and Members of the College, and that no Member of the Board shall hold office for more than five consecutive years, and at the expiration of this, his term, he shall not be again eligible until after after a period of two years has elapsed.

XI. *Respecting the Election of Fellows without Examination and of Honorary Fellows.*—Recommended: (*a*) That the alteration proposed by the Council in Section 5, Charter 15 Vict., be not adopted, and that the words "any two persons," read "not more than five." (*b*) That the Council may nominate distinguished members of the medical profession, whether Members of the College or not, as Honorary Fellows, to be elected by the Fellows and Members at the Annual General Meeting.

XII. *Respecting Meetings of Fellows and Members, separately and collectively.*—Recommended: (*a*) That there shall be an Annual General Meeting of the Fellows and Members at which the Annual Report of the Council, including the Treasurer's Statement of Accounts, duly audited, shall be presented, discussed, and if approved, adopted. (*b*) That no alteration in the constitution or in the relations of the College shall be effected without the consent of the Fellows and Members, convened specially to discuss such alterations. (*c*) That on receipt of a requisition signed by thirty Fellows or Members the President shall convene a meeting within twenty-one days of the Fellows and Members collectively (or, if demanded in the requisition, separately). At this special meeting or meetings the question or questions of which notice shall have been given in the requisition shall alone be discussed. (*d*) That such meetings shall be duly advertised in the weekly journals.

XIII. Recommended as a Bye-Law: That the Minutes of each Meeting of the Council shall be suspended for the inspection of Fellows and Members in the College Hall, or other convenient place, within twenty-four hours of the holding of such meeting, and that they remain suspended for a period of at least seven days.

THE CHOLERA EPIDEMIC.

WERE it not for the occurrences at Yport, in Normandy, and at Orancie, Algiers, the history of cholera in Europe and on the Mediterranean for the past week would have been one of steadily maintained abatement. Cholera news from the south of France has almost ceased. In Italy about twenty deaths still occur daily, but the diminution in mortality, both as regards the country generally and such cities as Naples and Genoa, is most satisfactory. So, also, the number of attacks in Spain has become so small that most of the inland quarantine restrictions have been removed, and even those at the ports have been so modified as to allow of a renewal of foreign trade transactions. But on October 21st news came of cholera at Yport, a fishing village between Fécamp and Etretat on the Normandy coast, and it appears that at least fifteen cases have occurred there, eight of the attacks being fatal. The first news pointed clearly to importation of the infection from the south of France, and it was explained that part of the crew of a Newfoundland fishing vessel having arrived at Yport from Cette, the disease began in a woman who washed one of the sailor's clothes, and then spread in a manner favourable to the theory that personal infection was in operation. Some doubt has, however, since been thrown upon the accuracy of the diagnosis in the first case, and there is an absence of any evidence to show that there had been any cholera at Cette, or that the crew in question had touched at any infected place, whether on the coast or inland; or again, that either of these had suffered from any choleraic symptoms. Still, the mere absence of news concerning these points is by no means conclusive against the disease being actually imported cholera, and the fact that no denial as to its alleged character comes in, even after the inquiry held by Dr. Gibert of Havre, must be regarded as showing that the first view expressed has been accepted in France. So abominable are the sanitary arrangements of Yport, the place being described as either a manure heap or a cesspool, according to the weather, and so filthy and drunken are the habits of the people, that either cholera itself would find in it ample means to favour its spread, or, on the other hand, any fatal form of specific diarrhœa might manifest itself there apart from the importation of the cholera contagium. An effort is being made to improve the more dangerous conditions under which the people are living, and it is to be hoped that these may successfully stay the outbreak.

As regards Algiers, it now transpires that cholera cases have occurred there for about a month past, and it is quite evident that, notwithstanding the stringency of the quarantine arrangements which have been maintained, the disease has found its way across the Mediterranean, and this, in all probability, in connexion with the shipment of troops from France. Oran, which is now reported to be infected, is in regular sea communication with Marseilles. The area of the 1884 epidemic has thus been again widened, and the transmission of the infection to a more southern climate may make the final eradication of the epidemic this autumn more difficult of accomplishment.

DR. TOMMASI CRUDELI ON MALARIOUS COUNTRIES, AND THEIR RECLAMATION.

THE last number of the *Nuova Antologia* contains an article on "Il Bonificamento dei Paesi di Malaria," by Dr. Tommasi Crudeli, well worth the attention of the practical hygienist.

Dismissing from scientific terminology the words "marsh miasm" and "marsh soil," and replacing them by "malaria" and "malarious soil," the author traces the fever poison thus indicated to "an agent which can infect the soil of any country, however that soil may differ from other soils in hydrographical and topographical conditions and geological composition."

This agent is a living organism inferred to exist long before microscopy. That its character should remain uniform in soils the most diverse proves that it cannot result from the chemical reaction of these soils. This persistent uniformity is easily understood on the admission that malaria is due to a fermentative organism which finds conditions favourable to its life and its multiplication in soils the most various, as is the case with thousands of other organisms much higher than the rudimentary vegetations which constitute living ferments.

The increasing intensity of the poison in malarious soils abandoned to themselves is especially demonstrable in Italy. Etruscan and Latin cities—Rome herself—arose in malarious regions, and they flourished mainly on account of the soil reclamation, which in the course of centuries diminished the production of the poison, without, however, succeeding in wholly suppressing it. The abandonment of the reclaiming processes led to the redevelopment of the poison—first during the Roman domination in the conquered and devastated Etruria, afterwards in Rome herself on the fall of the empire, and finally in Southern Italy. This redevelopment of malaria in the Roman Campagna has been witnessed in times not very remote from ours, localities where it was possible to enjoy summer residence (*villeggiatura*) having at that season become uninhabitable. In these localities the physical conditions of the soil have not varied for centuries; how, then, can the enormous increase of malaria be due to progressive alteration in the chemical constitution of the soil itself? Admit that malaria consists in a living organism whose successive generations infect to an ever-increasing extent the soil which contains it, and the explanation is easy.

Again, in regard to the malarious contents of the atmosphere. If the malarious ferment (*fermento malarico*) were composed of gaseous emanations from the soil, or of a chemical ferment formed in the soil and raised into the air together with watery vapour, the malarious contents of the atmosphere ought to reach their maximum in those hours when the soil is most warmed by the sun's rays and in which the evaporation of the water it contains and the chemical processes occurring within it are at their greatest intensity. But it is not so. The malarious contents of the local atmosphere are less in the noonday hours than at the

beginning and close of the day—that is, after sunrise and, above all, after sunset. Now, it is exactly at these two periods of the day that the difference between the temperature of the lower strata of the atmosphere and the temperature of the surface of the soil is greatest, and that the currents of air which ascend vertically from the soil into the upper atmosphere are at their strongest. Admitting that the malaria is formed of solid particles of low specific gravity (such as are the germs of the inferior vegetations), we see at once how it ought to accumulate in the lower strata of the atmosphere, especially in those two periods of the day.

The tendency among investigators has always been to attribute this specific poisoning of the air to a living organism which multiplies in the soil; but, unfortunately, the "palustral prejudice," as Dr. Tommasi Crudeli calls it, has led them to examine only the lower organisms which haunt marshes. In 1879 the author, in conjunction with Dr. Klebs, discovered the cause of malaria in a "schizomyces bacillaris," and recently Drs. Marchiafava and Celli have demonstrated that this parasite attacks directly the globules of the blood and destroys them after having determined in them a series of characteristic alterations, which indicate quite certainly the existence of a malarious infection. "Many observations," says the author, "just completed in Rome would tend to demonstrate that this parasite does not invariably assume the bacillary form described by Klebs and myself; but this purely morphological question need not concern the practical hygienist. For him it is essential to know that he has to deal with a living ferment which can flourish in soils the most diverse in composition, and without the presence of which neither marshes nor pools of putrescent water are capable of producing malaria."

Having incidentally shown that soils may contain this parasite in an inert state and not produce malaria till the circumstances favourable to its activity have arisen, Dr. Tommasi Crudeli proceeds to demonstrate that among the conditions which assist the development of the malarious ferment contained in the soil and the excessive air accumulation of that ferment in the air there are three of primary importance, as their concurrence is indispensable to the production of malaria. These are, 1st, a temperature not lower than 20°C.; 2nd, a moderate degree of permanent humidity in the malarious soil; and, 3rd, the direct action of the oxygen of the air on the strata of the soil which contains the ferment. If one only of these three conditions be wanting, the development of malaria becomes impossible. Now this is an important point in the natural history of malaria, as giving us the key to the chief part of the soil reclamation attempted by man.

First, let us take nature's amelioration of the malarious countries, suspending as she does for a longer or shorter time the production of malaria. Winter, for example, causes in all these countries a purely thermic amelioration—that is, it suspends the production of malaria simply by making the temperature fall below the minimum required for the development of the poison. In fact, there are often, even in winter, sudden outbreaks of malaria when a scirocco wind raises the temperature above this minimum. Again, during a very warm and dry summer malaria is not developed, because the sun's rays have exhausted the humidity of the soil, so producing a purely hydraulic amelioration, which, as in the Roman Campagna in 1881 and 1882, may last for a considerable time; easily to be dissipated, however, by one steady shower. Finally, there may occur in nature purely atmospheric ameliorations, when the surface of the malarious soil is withdrawn from the direct action of the oxygen of the air by means of natural earth-coverings formed by alluvial deposits of healthy soil, or by means of the "earth-felt" wrought up from the soil by the roots of herbage in a natural meadow.

In their various attempts to suspend the development of malaria from the soil men have tried to imitate nature—to eliminate, that is to say, one of the three conditions indispensable to the multiplication of the specific ferment contained in that soil. Naturally enough, they have never attempted thermic ameliorations, such as nature effects in winter, because it is not in their power to control the sun's rays. They have had to restrict their efforts to either hydraulic or atmospheric ameliorations; but sometimes they have succeeded in happily combining the one and the other—that is, in eliminating at once the humidity of the soil and the direct action of the oxygen of the air upon it.

Hydraulic amelioration has assumed many forms, according to the nature and site of the malarious soil. Drainage, in which the ancient Romans excelled us, has been practised in Italy both in deep and friable soils and in subsoils compact and almost impermeable, in which latter the "cunicular" drains of the Etruscans, Latins, Volscians, and Romans might even nowadays be studied with advantage.

Sometimes a twofold drainage of the upper, as well as the under, aspect of the soil may be practised—that is, draining the subsoil and increasing the evaporation of the surface water. The cutting down of forests in malarious countries has often proved an excellent means of amelioration; because by removing every obstacle to the direct action of the sun's rays on the surface of the soil, its humidity during the warm season is sometimes entirely exhausted. In spite of universal experience of this fact, a school originating with the great Roman physician, Lancisi, has sustained the contrary, counselling the maintenance and even the extension of forests in malarious countries. Lancisi was completely possessed with the "palustral prejudice," and believed that the malaria generated in the Pomptine Marshes, and attacking such townships as Cisterna, was intercepted, if only partially, by the forests between, and he therefore opposed the cutting down of the trees and recommended increased planting. He did not know that the malaria was already in the soil and covered by the forest in question. Some thirty years ago the Caetani family, to whom Cisterna belongs, cut down the forest, and twenty years thereafter Dr. Tommasi Crudeli was able to show that the health of the neighbourhood had greatly improved in consequence. A commission appointed by the Minister of Agriculture investigated the whole subject of the coexistence of woods with malaria, and in its report issued in 1884 completely disproved the theory of Lancisi and confirmed that of Dr. Tommasi Crudeli.

Absorbent plants have been suggested and used as a means of drawing humidity from the soil, not without success in certain countries really malarious. The prejudice that the malaria is due to the putrescent decompositions of the soil has, in Italy, led to the choice of the eucalyptus globulus as the tree best adapted to combat the poison, the idea being that the eucalyptus, which grows very rapidly, dries the humid earth, and at the same time by the aroma of its leaves destroys the so-called miasmata. No genuine instance of the eucalyptus having succeeded in its allotted task is yet known to Dr. Tommasi Crudeli, though he does not say that its success is impossible. Had its Italian patrons studied its action in its native Australia where it flourishes much better than in Italy, they would have known that there are eucalyptus forests in those latitudes where malaria is very prevalent, as has been shown by Professor Liversidge of the University of Sydney. The cultivation of the tree at the Tre Fontane, near Rome, which it was thought would prove entirely successful in combating the local malaria, disappointed expectations, for in 1882 that hamlet was the scene of a severe outbreak of the fever, while the rest of the Campagna was unusually exempt from it. The eucalyptus, in fact, is a capricious tree in European soil; while in full leaf, during the winter, it is often killed by nocturnal frost, and even by the late frosts of spring, to say nothing of humid cold and other adverse influences not yet formulated by the botanist; again, when the winters are mild and the soil deep, it often shoots up rapidly, only to be snapped asunder by winds of moderate strength. Eucalyptus plantations, moreover, are very costly. If the ground is watery, it has to be drained, otherwise the roots rot; if the ground is heavy, trenches must be dug in it to make room for the long roots of the trees, and often these trenches have to be drained, as is done in the case of olives, in order to prevent the filtration water from stagnating and the roots from rotting. Hydraulic amelioration must have recourse to means less uncertain; and should the conditions of any locality counsel a trial of an absorbent plantation, it should be done with trees of our own hemisphere. The expense is smaller, and the trees are sure not to die.

At best, hydraulic amelioration is never certain, because the slight humidity of the soil necessary to develop malaria may easily be restored to it, even during the warm season. Combination of atmospheric with hydraulic amelioration has therefore been tried: to withdraw, that is to say, the humidity from the soil, while at the same time preventing the direct contact of the air with its malarious strata. Leaving the soil with layers of sound earth spread over it either alluvially or by the hand of man, and also draining the soil itself, was last year, at the instance of Dr. Tommasi Crudeli, practised on the grounds of the Janiculan Hill, near the Palazzo Salviati, in the Lungara. The entire area,

having been thoroughly well drained and then covered with a dense coating of meadow soil in all those places which could not be paved with street rubble, has since remained without a single case of fever in the numerous *personnel* of the Military College occupying the Palazzo Salviati, while in the Palazzo Corsini, on the same side of the Lungara, but looking on the grounds of the Janiculan which are still exposed to the air and sun, there have within the same period been not a few cases of fever, some of them fatal.

THE WOUNDED AT FOOCHOW.

DR. T. R. ADAM, Surgeon to the Foochow Native Hospital and Dispensary, has favoured us with the following interesting description of some of the cases which came under his care or observation as the result of the recent engagement at that port:—

As over fifty men, wounded in the late so-called naval engagement at Pagoda Anchorage, Foochow, came under charge of Dr. Rennie and myself as patients in the Foochow Native Hospital, it struck me that a brief notice of the most important of our cases might interest your readers. The engagement took place on Saturday, Aug. 23rd. A goodly number of wounded, carried down the river by the strong current and ebb tide, were rescued by the boats' crews from H.M.S. *Vigilant*, *Sapphire*, and *Champion*. Those who managed to reach the shore dragged themselves to deserted Chinese houses, and lay there utterly untended and uncared for, as far as the Chinese Government was concerned. On Monday a party of us from Foochow picked up eleven of these poor wretches, all very seriously wounded and in a most miserable condition. These, along with the cases rescued by Her Majesty's ships, were placed in the Native Hospital. Every flood tide thereafter brought, through native sources, fresh additions to the number, till our list rose to over fifty. The great majority of our cases presented wounds inflicted by Hotchkis's shells. The severe nature of such wounds, together with the terrible after-neglect, made our death list heavy. Six cases succumbed within a fortnight. They were as follows:—

1. Right leg shattered by a shell; total neglect for forty-eight hours. Amputation through knee-joint. Died two days after operation from sheer prostration.

2. Knee-joint traversed by fragment of shell; total neglect for forty-eight hours. Dressed antiseptically and wound tolerably healthy; but death from prostration ensued six days after admission.

3. Extensive burn of face and body from gunpowder explosion on board a war junk. Death from collapse.

4. Forearm shattered by a shell; total neglect for six days. Hand and forearm black on admission; amputation performed in lower third of arm. Recovered well from shock, but one flap showed signs of sloughing. Eight days after operation secondary hæmorrhage occurred. Patient was dozing at the time and much blood was lost before he called his attendant's attention to the accident. Before an assistant could be obtained and a tourniquet applied, patient was in a fatal swoon. Such an occurrence would be rare in a home hospital, but we have to make the best of the native material afforded us for nurses and assistants.

5. Patella shattered by fragment of shell, and knee-joint laid open. Broken fragments of bone were removed and wound dressed antiseptically. Locally all seemed to go well, but a low form of surgical fever exhausted patient's feeble reserve of strength, and he succumbed nine days after admission.

6. Compound comminuted fracture of both bones of leg with much destruction of soft parts; total neglect for four days. Patient would not permit amputation, but gangrene setting in a day or two after admission the limb was removed through the middle of the thigh. Skin of flaps looked perfectly healthy, but a portion of the cellular tissue was observed to be ominously dark-coloured. For four days the patient did well, acute gangrene then suddenly set in, followed by death from exhaustion within twelve hours.

Among cases of severe wounds progressing favourably the following may be noticed:—

1. Shattered leg; amputated just below knee very shortly after receipt of injury, by Dr. Biddulph of H.M.S. *Vigilant*. Patient had by no means a vigorous constitution, but shock rapidly passed off, and wound healed almost by first intention.

2. Compound comminuted fracture of humerus with great destruction of soft parts. Amputation performed in upper third; dressed antiseptically and doing well.

3. Knee-joint traversed by fragment of shell. Acute pain occurred for a few days in joint, but this subsided and the case is now doing well; dressed antiseptically.

4. Compound comminuted fracture of humerus in middle third. Dressed antiseptically and doing very well.

5. Elbow-joint traversed by fragment of shell and lower end of humerus splintered. Resection of ends of humerus and ulna performed. Dressed antiseptically and doing well.

6. Compound comminuted fracture of left humerus, and right elbow-joint penetrated by fragment of shell. This man was shot while in the water, with his arms extended over a floating spar. As the French were accused of cruelly firing upon disabled Chinese in the water I made careful inquiries among our patients, and think the following statement the correct one. After the first broadside delivered by the French a large number of many of the Chinese gunboats' crews leaped overboard and struck out lustily for the shore. These men were fired on from the "tops" of the French vessels, but these alone. The French themselves, I was informed, rescued some twenty wounded Chinese and treated them on board.

7. Hand split in two by bursting of gun. The forefinger with metacarpal bone was carried away, the first carpo-metacarpal joint laid open, and fully one-third of soft parts of back of hand destroyed. Sloughing tissue was pared away and wound dressed antiseptically. Healing is rapid, and patient will retain a useful hand.

8. A bugler, twenty years old, was struck while in the water by the cup of a Hotchkis's shell. The brass-headed fragment entered at the lower part of the hip, passed round the inner side of the femur, splintering but not fracturing it, and lodged in the groin, just inside of the femoral vessel. The lad was eleven hours in the water before he was rescued. He is but slowly recovering from the shock. A large perforated drainage-tube has been inserted through the wound from the groin to the hip, and gives free exit to discharge from sloughing tissue in the track of the fragments of the shell.

9. Splinter of shell entered left eye. Immediate enucleation saved the right eye from sympathetic inflammation.

10. A poor salt junk sailor, who did not want to fight, but was impressed into the service, received, as his only reward, a fragment of shell in his back. Glancing off the middle dorsal spines, the fragment buried itself laterally in the long muscles of the back. A few days after extraction an abscess formed over the hip, and this, on being opened, was found to communicate freely with the wound. Doing well.

11. A chair coolie ashore received a shot from some careless soldier. The bullet entered the great sacro-sciatic foramen and disappeared in the pelvis. A probe can be passed into the wound for about ten inches upwards in front of the sacrum towards the abdominal cavity, but no bullet can be found. A large drainage-tube has been inserted, and the wound dressed antiseptically. The abdomen has become somewhat swollen, but is not painful on pressure. The future of this case will be an interesting study.

12. Compound transverse fracture of head of tibia with open knee-joint. Dressed antiseptically, the case did well, but after a week's residence in the hospital the patient went off to headquarters to bespeak his pay. Warning of loss of limb or life could not deter him. Such cases are no unusual feature of Chinese practice.

Five cases of traversing wounds of the thigh all progress favourably. In one case a fragment of shell sliced off a portion of the anterior surface of the thigh, leaving an excavated saucer-like wound. Our remaining cases include traversing wounds of shoulder, forearm, calf, ankle-joint, &c.; burns from explosions of gunpowder; compound fractures of bones of the leg, &c., with details of which I must not trespass further upon your space.

Foochow, Sept. 5th, 1884.

A MEDICAL PRESIDENT.—Dr. Don Rafael Zaldivar, President of the Republic of San Salvador, is reported, says the *New York Medical Record* of October 18th, to be a very accomplished physician. He has just been chosen for a third term, and is now travelling in Europe.

WILLS OF MEDICAL MEN.

THE will of Cæsar Henry Hawkins, F.R.C.S., F.R.S., serjeant-surgeon to the Queen, late of 26, Grosvenor-street, who died on July 20th last, was proved on the 23rd ult. by Mrs. Ellen Hawkins, the widow, the sole executrix, the value of the personal estate exceeding £45,000. The testator bequeaths the bust of himself by Mr. Richard Halse, presented to him by his former pupils, to his wife for life, and then to the governors of St. George's Hospital, to which he had been so long officially attached; the portrait of his late uncle, Mr. Pennell Hawkins, by Loffany, to his wife for life, and then to the Royal College of Surgeons, to be placed near the picture of his brother, Sir Cæsar Hawkins, by Hogarth; and his medical books (except such as may be selected by his wife) to the Students' Library of St. George's Hospital. He also bequeaths his stocks and shares in the Great Northern Railway upon trust for his wife for life; at her death numerous legacies are to be paid thereout, and out of certain moneys in settlement to his brothers, sister, nephews, nieces, and others, and the remainder of the same funds is to be divided between his nephew and niece, Cæsar Richard Hawkins and Mary Frances Hawkins. There are legacies to his trustees, and the residue of his property he gives to his wife absolutely.

The will of John Carnegie, M.D., late of Chesterfield, Derbyshire, who died on May 4th last, was proved on the 29th ult. by Mrs. Agnes Diana Knight Carnegie, the widow, Mr. Andrew William Manson, and Mr. James Bruce, the executors, the value of the personal estate amounting to over £11,000. The testator leaves his plate, books, pictures, furniture and effects, and £100 to his wife; and the residue of his real and personal estate upon trust for her for life or widowhood. If his wife marries again, one-third of the income is to be paid to her; subject thereto the residue is to be equally divided among his children.

The will of Thomas Bishop, M.D., F.R.C.P., late of 16, Rue Pierre Charron, Champ Elysées, Paris, and of Hayne Croft-road, Torquay, who died on June 23rd last, was proved on the 16th ult. by Mrs. Cecilia Agnes Bishop, the widow, and Miss Effie Rose Bishop, the daughter, the executresses, the value of the personal estate amounting to over £8000. The testator leaves £100 to Mrs. Mary Peel, free of duty; £200 per annum to his said daughter during the life of his wife; and the remainder of the income of his property to his wife for life. At her death he gives the residue of his property to his daughter.

The will of Hugh Cuolahan, M.D., late of 9, Grange-road, Bermondsey, who died on August 20th last, was proved on the 12th ult. by Mrs. Maria Carolina Cuolahan, the widow and sole executrix, the value of the personal estate amounting to over £4000. The testator gives, devises, and bequeaths all the real and personal estate which he shall be possessed of or entitled to at the time of his decease to his wife.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. William Robert Mitchell, late of the Stock Exchange, and of 14, North-terrace, Camberwell, £1000 to the Middlesex Hospital.—Mr. Thomas Browning, formerly of Hatton-court, Threadneedle-street, and of 6, Whitehall, but late of Queen Victoria-street, fifty guineas each to Charing-cross Hospital, the Hospital for Consumption and Diseases of the Chest, Brompton, and the Cancer Hospital, Brompton.—Mr. Edward Samuel Dowling, late of 14, Holland-villas-road, Kensington, £500 to the North London or University College Hospital on the death of his wife.

THE WATER-SUPPLY OF DUMFRIES.—On the 10th inst., Dr. J. M. M'Culloch delivered the first of a second course of health lectures which it is proposed to hold during the present winter in Dumfries. The subject of the lecture was "Water: use in the body; water suitable for domestic use, with special reference to Dumfries water-supply; effects of impure water," &c. In the course of his address Dr. M'Culloch recommended that the future water-supply of the town should be derived from loch Grennoch, a source which he described as eminently suitable for such a purpose.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On the Prevalence of "Fever" in Burnley, by Dr. AIRY.—For some years past the general death-rate of Burnley has been high, the mean for the past thirteen years being 24·4 per 1000. During the same period the "fever" death-rate has also been excessive. In the four years 1870-73 it was especially high, then came a marked diminution, but from 1881 onwards it increased again. At first there appeared grounds for fearing that the fever in question was typhus, but apart from cases which seem to have been incorrectly certified, the prevalent disease has clearly been enteric fever. The most recent epidemic of this disease commenced in October, 1882, during which month nine deaths were registered as due to it, and from that time forth until February of this year fatal cases followed each other with very little abatement. Dr. Airy found it impossible at the date of his recent inquiry to trace the commencement of the epidemic to its proper source, although this should have been possible when the outbreak commenced, especially in the face of the sudden character of its onset. But speaking generally, both as regards the early and later history of the prevalence, the evidence went strongly to connect it with the presence of excremental nuisances and defective drainage. Burnley has done good sanitary work since 1870; it has a wholesome water service, and a new system of sewers. But the house connexions with the new sewers are in some cases faulty, and in their effort to do away with the old and offensive midden-privy the Corporation have fallen into error. It is to this that Dr. Airy principally draws attention, and it is evident that with this he mainly connects the outbreak under discussion. Between seven and eight thousand tank privies have been provided in the borough. The tank is an earthenware one containing either nine or sixteen cubic feet of contents. It is sunk in the ground at the back or the side of the privy with an earthenware cone placed under the seat, fitting into a bay in the rim of the tank, and about six inches below the rim on one side there is an overflow pipe, communicating with the inside of the tank by a cluster of eight holes to convey the top fluid to the sewer. Now, like nearly all such overflows, this grating is apt to get stopped, as, for example, by means of floating pieces of paper; but apart from this, the existence of an overflow is in itself absolutely wrong in principle. If drains and sewers are available and fit for the removal of the offensive overflow liquid from a privy pit, there can be no justification whatever for retaining nine and sixteen cubic feet of excreta close to dwellings. The whole contents of the closet should, in short, go to the sewers, and not the surface fluid only. But, as has often been pointed out, the passage into the sewers of privy pit liquid which has been retained long enough to decompose and become offensive, causes nuisance and a foul state of drains and sewers, and it is because this is so well known that modern bye-laws nearly all prohibit any connexion between a privy and a drain. There are other points about the Burnley privy which, though arranged with the best intention, have not turned out satisfactorily, and it is to be hoped that in a borough of 64,000 people the Town Council will now discountenance the storage under any circumstances of from nine to sixteen cubic feet of excremental filth at some 7000 points in the district. Dr. Airy advocates the trough closet system, and that form of closet is found to work well when provided with the automatic system of flushing, such as is now being exhibited at South Kensington by Messrs. Bowes, Scott, and Read; the plan is not only admirably adapted to the dwellings of the lower classes, but it is economical in its working. One other fault in the sanitary administration of Burnley lies in the fact that the medical officer of health is not provided with an immediate notice when a death from infectious disease occurs. This is the more strange when coupled with the fact that although under the Burnley Improvement Act, 1883, a system of compulsory notification was provided, yet when Dr. Airy made his report in July last, no steps whatever had been taken to carry it into effect. Much work has been done in

Burnley, and it is to be hoped that the future action taken will be in such directions as to reduce the excessive mortality from enteric fever which has so long prevailed there.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

St. Pancras.—Estimating the population of this metropolitan parish at 239,174 for 1883, Mr. Shirley Murphy reports an exceptionally low birth-rate of 32·2 and a death-rate of 20·7 per 1000 living. Only thirteen cases of small-pox were heard of, and vaccination is carried out with great efficiency. Indeed, there is not a single birth remaining quite unaccounted for during the latter half of 1882, and there are only three outstanding cases amongst the children born in the first half of 1883. Speaking of scarlet fever, Mr. Murphy points out some of the conditions under which it was found to spread, and he records a case in which a family of four were occupying the single room they possessed together with a scarlet fever corpse. Such conditions as these, he urges, show strongly the need for proper mortuary accommodation, and it is certain that so long as the only mortuary is at the workhouse, where it is surrounded with all the degrading associations of pauperism, the population cannot be educated to understand the value which attaches to the early removal of the dead from amongst the living. Enteric fever caused 132 deaths in 1883, this being nearly 78 more than the average number for the preceding ten years. The cause of the large outbreak which attacked 431 persons will be remembered in connexion with Mr. Murphy's inquiry in the autumn of last year into the circumstances of a dairy farm near St. Albans, the milk from which was unquestionably shown to have been the vehicle of infection. In connexion with the infant mortality, Mr. Murphy presses the vestry to make regulations as to tenement houses, and he urges that until they have done so they will not have exercised to their full extent the powers they possess for improving the condition of their poorer parishioners. We note with much regret that this important matter receives but tardy attention at the hands of some metropolitan authorities. Mr. Murphy would gladly see fresh legislation on this subject, and he points out that if, in default of the immediate owners of tenemented property maintaining their houses in proper condition, as by neglecting to carry out the repairing clauses of leases, they could be made to forfeit their leases, houses that are occupied by the very poor would not continue to be owned by those who are unwilling or unable to maintain them in a proper habitable condition.

Limehouse.—In the Limehouse district the birth and death-rates for 1883 were 25 and 38 per 1000 respectively. The sewer ventilators in several parts of the district have been a constant source of complaint, and a new system is now being attempted at some of the principal points. Some measures are also being taken to do away with some of those conditions of housing which are a disgrace to the metropolis. After several efforts at improvement, Elizabeth-court has been closed under a magistrate's order. An area in Shadwell, too, has been reported to the Metropolitan Board of Works under the Artisans and Labourers Dwellings Act, 1875. Many of the houses are built back-to-back, most of them are in a very bad structural state, and the death-rate for the last three years has averaged 44 per 1000. In other localities either works of alteration and improvement or actual closure of houses is going on; but it is evident from the description given by Mr. Rogers that much more is needed in this direction than he is at present able to effect.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

During the week ending the 25th ult., 5986 births and 3517 deaths were registered in twenty-eight of the largest English towns. The annual rate of mortality in these towns, which in the two preceding weeks had been 19·8 and 21·1 per 1000, declined last week to 20·9. During the past four weeks of the current quarter the death-rate in these towns averaged 20·5 per 1000, against 20·9 and 19·6 in the corresponding periods of 1882 and 1883. The lowest rates last week in these towns were 16·1 in Portsmouth, 16·5 in Sunderland, 18·4 in Birkenhead, and 18·7 in Plymouth. In the other towns the rates ranged upwards to 25·4 in Bolton, 26·1 in Manchester, 26·4 in Liverpool, and 31·5 in Preston. The 390 deaths referred to the principal zymotic diseases in the twenty-eight towns included 105, which resulted from diarrhœa, 66 from scarlet fever, 66 from "fever" (principally enteric), 55 from measles, 46 from whooping-cough, 32 from diphtheria, and 19 from small-pox. These diseases caused the lowest death-rates in Norwich and Plymouth, and the highest in Cardiff, Preston, and Derby. The highest rates of mortality from scarlet fever were recorded in Newcastle-upon-Tyne and Halifax, from measles in Cardiff, from whooping-cough in Bradford and Salford, and from "fever" in Preston, Leeds, and Derby. The 32 fatal cases of diphtheria in the twenty-eight towns included 22 in London, 2 in Brighton, 2 in Liverpool, and 2 in Birmingham. Small-pox caused 15 deaths in London (exclusive of 6 London cases registered outside Registration London), 1 in Wolverhampton, 1 in Birmingham, and 1 in Hull. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 504 and 558 at the end of the two preceding weeks, further rose to 596 on Saturday last; the cases admitted were 173, against 68 and 144 in the two previous weeks. The Highgate Small-pox Hospital contained 20 patients on Saturday last, 6 new cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which in the five previous weeks had increased from 159 to 286, declined to 274 last week, and were 92 below the average. The causes of 75, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of deaths were duly certified in Portsmouth, Leicester, Plymouth, and in three smaller towns. The largest proportions of uncertified deaths were recorded in Bristol, Oldham, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·8 and 21·3 per 1000 in the two preceding weeks, was 21·4 last week, and exceeded by 0·5 per 1000 the mean rate during the same period in the twenty-eight large English towns. In the Scotch towns the rates last week ranged from 14·8 and 17·1 in Leith and Greenock, to 24·9 in Paisley and 25·0 in Glasgow. The 517 deaths in the Scotch towns included 22 which were referred to measles, 21 to diarrhœal diseases, 19 to scarlet fever, 17 to diphtheria, 15 to whooping-cough, 15 to "fever," and 1 to small-pox; in all, 110 deaths resulted from the principal zymotic diseases, against numbers declining from 137 to 101 in the three preceding weeks. These 110 deaths were equal to an annual rate of 4·6 per 1000, which was double the average rate from the same diseases in the twenty-eight English towns. The 22 fatal cases of measles exceeded by 4 the number in the previous week, and included 12 in Glasgow. The 21 deaths from diarrhœal diseases showed a further decline from recent weekly numbers. Of the 19 fatal cases of scarlet fever, 13 were returned in Glasgow. The deaths referred to whooping-cough, which had been 20 and 18 in the two preceding weeks, further fell to 15, of which 8 occurred in Glasgow and 3 in Edinburgh. The deaths from "fever" showed a slight increase; 8 were returned in Glasgow and 3 in Paisley. A fatal case of chicken-pox (which in Scotland is classed as small-pox) was recorded in Glasgow. The 85 deaths referred to acute diseases of the respiratory organs in the eight Scotch towns showed a decline, and were 16 below those returned in the corresponding period of last year. The causes of 82, or nearly 16 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which in the three preceding weeks had increased from 26·3 to 30·2 per 1000, declined to 26·8 during the week ending the 25th ult. During the first four weeks of the current quarter the death-rate in the city averaged 28·0 per 1000, the rate for the same period not exceeding 16·4 in London and 17·6 in Edinburgh. The 180 deaths in Dublin last week showed a decline of 23 from the number in the previous week, and included 29 which resulted from the principal zymotic diseases, against 49, 32, and 25 in the three preceding weeks; of these, 12 were referred to scarlet fever, 7 to diarrhœa, 6 to "fever," 3 to whooping-cough, 1 to diphtheria, and not one either to measles or small-pox. These 29 deaths were equal to an annual rate of 4·3 per 1000, the rate from the same diseases being 1·7 in London and 2·5 in Edinburgh. The fatal cases

of scarlet fever, which in the two previous weeks had been 11 and 5, rose to 12 last week. The 7 deaths from diarrhœal diseases showed a further decline from recent weekly numbers, and the fatal cases of "fever" were 4 less than those recorded in the previous week. Five inquest cases and 6 deaths from violence were registered during the week, and 56 deaths occurred in public institutions. The deaths both of infants and of elderly persons showed a decline from the numbers in the previous week. The causes of 18, or 10 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

THE LATE DR. RABBETH.

To the Editor of THE LANCET.

SIR,—The exemplary, generous, and fatal devotion of Dr. Samuel Rabbeth to the duties of his profession has added his name to the list of our medical heroes. We should all be losers if his example were forgotten. It suggests itself therefore to me that a gold medal, bearing Dr. Rabbeth's name, and to be annually awarded to a Bachelor of Medicine of the University of London, on terms to be hereafter considered, might be a suitable memento of his heroism, as of that of many others. I cannot doubt that the Senate would gladly become trustees of any fund for such a purpose, and charge themselves with the duty of awarding the medal. I shall gladly contribute to any such fund.

I am, Sir, your obedient servant,

WILLIAM W. GULL.

Brook-street, Grosvenor-square, W., Oct. 27th, 1884.

P.S.—The question whether such risk need have been incurred is quite another matter, and upon which I will write later.

CORROSIVE SUBLIMATE AS A SURGICAL DRESSING.

To the Editor of THE LANCET.

SIR,—In his address on this subject Sir Joseph Lister called attention to the irritating properties of the sublimate solution in a case of amputation of the mamma. He says, "On the day after the operation, when we changed the dressing, I found that under the oiled silk, exactly corresponding to its extent, the skin was highly irritated, and was covered with small vesicles. I also found that the inner side of the arm, where there was no wound, was in the same state of intense irritation." The explanation of the latter he gives as follows:—"In the case of the arm what occurred was, free perspiration had taken place, and the perspiration forming with the corrosive sublimate in the gauze, a watery solution had produced irritation where the perspiration was, on the same principle as the watery solution had caused irritation under the protective." Whatever may have been the cause of the eruption under the protective, it appears to me that the cause of the irritation in the arm is to be found in the irritating properties of the eucalyptol, and the following case seems to confirm this view.

On April 28th last I removed the mamma of a woman aged thirty-four, and cleared out the axilla. According to my usual practice, the operation was performed without any antiseptic. The wound was immediately covered with thymol gauze, which I prefer on account of its absorbent property; over this was placed a thick pad of absorbent wool (Von Bruns' Red Cross), and these dressings were kept in place by a many-tailed bandage of eucalyptol gauze—a method which I would commend to the notice of surgeons instead of the old-fashioned plaster and roller bandage. The left bare arm lay on the chest in contact with the gauze. On the following day, corresponding exactly with Sir Joseph Lister's case, the arm was intensely irritated, and the limits were those of direct and close contact with the gauze. So great was the irritation that near the wrist the vesicles coalesced, and in the course of another day alone formed a blister as large as a half-crown piece. After the second day, of course, the skin was protected from the gauze. On the skin of the body there was very little effect produced, probably on account of its greater power of resistance. The wound, which, with one-half of the chest, was protected by the thymol gauze and wool, healed by first intention and without a blush, as I am accustomed to see it; the tube, on its removal on the fifth day for the purpose of clearing and shortening, contained a beautiful specimen of organised blood-clot, which is now before me, and the patient went home quite well on the fifteenth day.

Here, then, there could be no doubt as to the cause of the irritation, and I would suggest that the same cause operated in the case in question, rather than that the sublimate should have passed through the "abundant eucalyptus dressing," which was put on outside the sublimate gauze.

I am, Sir, yours faithfully,

GEO. GRANVILLE BANTOCK.

Granville-place, W., Oct. 28th, 1884.

THE COLLEGE OF SURGEONS EXAMINATIONS.

To the Editor of THE LANCET.

SIR,—At a time when there is a probability of the coalition of the Colleges of Physicians and Surgeons it may be opportune to express the views of a teacher on what he considers the unsatisfactory results of the College of Surgeons examination. It has become a trite saying amongst students "that there is no disgrace attending a rejection by the College of Surgeons, since the examination is of such a fluky character." I put this in the words of one who had recently obtained his membership, and I believe it echoes the sentiments of a considerable number of teachers as well as students. I speak as a teacher when I say that I think the College of Surgeons examination is a most unfair one, for I am perfectly certain that it often rejects very good men, whilst inferior ones are occasionally allowed to pass. At present it is impossible for any teacher to send up his pupils with confidence; for he feels that it is almost as likely that the better men will be referred and the worse accepted, as that the weak student will be rejected and the good one pass. To the London student this may perhaps be no very great hardship, for if there be no great loss of prestige he has not been put to much expense, and possibly no one knows that he has been in for an examination; but to the provincial student no little inconvenience ensues, for the necessity of a several days' absence in London compels him to acquaint his friends and puts him to a considerable amount of expense; thus to the financial loss is added the multiplication of friendly condolence. If the rejections were just I should be the last to protest against them, but I am convinced that many referred candidates are extremely well up in their work, and have been rejected from simple nervousness, the time allowed being too short and the examiners too hasty to elicit the knowledge, which though present is incapable of being roughly extracted. To mention a few examples:—

Of two students, one, rejected several times for his primary, and again for his final, advised by his teachers not to go for examination, proceeds to London with a gentleman who had passed his primary creditably, had done well at the school, had acted as resident assistant house-surgeon for a year, where he was highly appreciated for his good work and was advised by his teachers to enter his name for the final. Result: the former passed, the latter was referred, and, strange to say, only in the subject which it was well-known he knew best—viz., surgery. A medalist in all the subjects of examination was referred for six months. The medalist of the year in anatomy and physiology, but a reticent, somewhat shy man, was rejected; whereas several, whom he was head and shoulders above in knowledge of the subjects, passed. A qualified practitioner, well acquainted with his work and known by his teachers to be extremely well up, was rejected because he could not recognise a pathological specimen, and so by losing the greater part of the ten minutes allotted for this section, getting a bad mark and spoiling an otherwise good examination. An excellent student, as proved by school and clinical examinations, was rejected, and yet very shortly afterwards was able to obtain his final M.B. at one of the universities. Were it necessary, the above list could be increased, but I think these cases are sufficient to show that there is some ground for complaint. Where does the fault lie 1. With the hurried character of the examination—e.g., ten minutes for pathology, which time is utterly inade-

quate for the examiner to elicit more than one or two points of such an extensive subject; and which ten minutes may be entirely wasted by trying to make a student recognise something which the examiner has himself had to ask the curator the nature of before he began the examination. This is a fact which, to my knowledge, occurred some time ago. The time for the *viva voce* should be considerably increased, so as to give a nervous student the chance of collecting his thoughts; it is manifestly unjust that any man who knows his subject should be rejected simply because he is rather slow in answering under excitement; but at present an examiner cannot give him the time, since only a few minutes elapse before he has to take another student, and if the unfortunate candidate happens to bungle a little over his first specimen or case, there is no possibility of making up for lost time. 2. The system of marking is essentially a bad one, and might be easily remedied. 3. Those who have gone through the portals of the two Colleges in London cannot fail to contrast the courteous and gentlemanly treatment they receive at the College of Physicians as compared with the hurried rush through customary at Lincoln's-inn-fields. I am, Sir, yours truly,

A. W. MAYO ROBSON, F.R.C.S. Eng.,
Oct. 1884. Hon. Surgeon, Leeds General Infirmary, &c.

"THE SINS OF THE SOUTH-WESTERN."

To the Editor of THE LANCET.

SIR,—The shortcomings of the London and South-Western Railway Company have recently been the subject of some censorious comments in *The Times*. Permit me to point to a medical aspect of its shortcomings.

A large area of the south coast, embracing many of our most famous seaside resorts, especially winter health resorts, is more or less completely under the sway of this railway company. I should have liked to have written "served" by it, but "commanded" is the most appropriate term. A very large section of its best-paying patrons are invalids and persons suffering under bodily infirmities—persons indeed in every sense worthy of consideration. Yet what does this line do for the comfort or convenience of these travellers?

At no station is a space of time greater than three minutes allowed to the passengers. Other lines have certain places where the stay is five or even ten minutes, whether the train be late or punctual. What these three minutes may mean at times is an indefinite space, and after having bustled the passengers into the train a space of time is wasted before starting, which, if allowed to the passengers, would have made all comfortable. This line has a slow rate of speed, and studies but little the comfort of its patrons, yet it is notoriously unpunctual. Where is the time lost? The answer is, On the runs betwixt station and station. Its rate of speed is not so great but that it might "make up" time on this run, instead of "losing" more. Its unpunctuality is not due to the study of the convenience of its patrons, but to bad working arrangements. It is not good for invalids, in my opinion, to be kept unduly in railway carriages, either as to mind or body. This is one sin.

Let me furnish another instance of its care (!) of its passengers. Having a lady in delicate health in charge, it was thought desirable to reach Waterloo in good time in order to get comfortably seated for the journey. What was the result? We had to wait amidst an increasing crowd till five minutes from the time to start, when the train was backed in, and the crowd on the platform rushed to their seats—the weakest getting the worst places. Surely the rules of other companies might be followed on a line so very largely—if unavoidably—used by invalids. Yet another instance of their study (!) of the comfort of their passengers. A medical *confrère* assures me that it is not two years since a lady in infirm health had to be moved from the south coast to London. The South-Western had no invalid carriages, and one had to be procured from the Great Northern Railway Company. Yet this line and the seaside resorts long its route are largely maintained by invalid visitors, whose comfort ought to deserve some study. Many others are deterred by "the journey." Nature has done much for the south coast, but it cannot be said that the London and South-Western Railway Company does much to second her efforts. It is cruel to treat the weakly as it habitually does.

I remain, Sir, yours faithfully,

October 28th, 1884. J. MILNER FOTHERGILL.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

PRESENTATION TO THE MAYOR OF NEWCASTLE.

A LARGE number of leading citizens, including several prominent members of our profession, assembled in the council chamber of our City Hall last week to witness the presentation to our mayor, Mr. H. W. Newton, surgeon, in recognition of his valuable services on the late visit of the Prince and Princess of Wales. The testimonial, which was subscribed to by all classes in the city and its vicinity, took the form of a massive and very handsome candelabrum, forming an epergne for flowers, &c. beautifully designed in the Renaissance style, the base being surmounted by four finely modelled figures, emblematical of the seasons, with side pieces for fruit in the same style of ornamentation, and decorated with figures symbolical of fishing, shooting, &c. There was also presented to the mayoress—who, as the deputy mayor, Mr. T. L. Gregson, surgeon, who presided, said, "had so ably seconded the mayor in every effort in his public capacity"—a very handsome case of brilliants and earrings, with a large diamond brooch, "which he hoped she would long have strength and happiness to wear." The deputy mayor remarked that he felt proud that a colleague of his own profession had held the office of mayor on the Royal visit, and still more proud of his success; indeed, the Royal visit would appear to have produced the happiest effects here in the way of binding all classes together to make the occasion worthy of the North.

DARLINGTON HOSPITAL DISPENSARY.

A bazaar and fair in aid of the new hospital building fund was opened at Darlington a few days since by the Duchess of Cleveland. It is estimated that the new hospital will, with all necessary appliances, cost at least £10,000. Beyond this it is desirable to provide at least £5000 for an endowment fund. Towards this sum of £15,000, £9500 has already been promised. The present annual expenses amount to about £1250, and the income, which is always liable to great fluctuations, does not exceed £1100. In the new hospital the expenses will necessarily be increased by £300 or £400 per annum. A good deal of interest has been taken by the public press in this effort, and I hope to be able to report to you some very satisfactory results from the bazaar.

ALNWICK INFIRMARY.

At the annual meeting, just held, Earl Percy presiding, an increase was reported in the number of patients admitted, but it was mentioned as a hardship on the subscribers that eleven of the in-patients were connected with the construction of the Alnwick and Cornhill Railway, and that their share of the expenditure amounted to about £40, while the only additional subscription received from the contractors was £5 5s. It appeared clear to the committee that the institution could not continue to admit such patients unless a much larger sum was paid on their account. The committee also expressed their pleasure with the way in which Dr. Davidson had performed the duties of house-surgeon during the year.

Newcastle-on-Tyne, Oct. 27th.

EDINBURGH.

(From our own Correspondent.)

THE WINTER SESSION.

THE winter session opened on Tuesday both in the University and Extra-Academical Schools, and, so far as can be at present judged, the number of students will be fully up to, if not beyond, the average of the past few years. Reviving what used formerly to be an annual custom in connexion with the opening of the winter session in the University, the Principal, Sir Alexander Grant, delivered an address to the students. Referring to the recent Tercentenary festival, he said that the lesson of the celebration should remind students and office-bearers alike of their responsibilities, and stimulate them to maintain and carry on the

work of their predecessors. He referred with great satisfaction to the part which the students had taken in the festival, and congratulated them on the step which had been taken towards the organisation of student life by the establishment of the Students' Representative Council. "What I want," he said, "to bring out and emphasise is that the general body of students of this University appeared at the festival and on other occasions during the year no longer as a fortuitous concurrence of atoms, but in some respects as an organic body, self-organised; no longer inarticulate, but provided with the means of constitutionally expressing its ideas and wants, and exhibiting considerable *savoir faire*." He next alluded in some detail to the Bill which had last session been introduced for the Better Endowment and Improvement of the Scotch Universities. Ultimately, he said, this or a similar Bill will become law, and it will afford scope for improvement in the University, and its results will stamp the character of our fourth centenary. The Universities (Scotland) Bill of last session was, taken all in all, a very good Bill, but not a perfect Bill—and for this reason, that it was not, so to speak, a holograph; it was not of one authorship, but a composite production, made up of separate contributions from distinct sources—namely, from the Lord Advocate's office and from Her Majesty's Treasury. And he compared these two threads in the Bill to the Rhone and the Arne, running together distinct in one bed—"a clear stream flowing by a muddy one." Almost all the provisions in the Bill devised by the Lord Advocate were admirable, but they were marred by clauses which came in from the Treasury. What he complained of was the principle which the Treasury attempted to introduce into the Bill. This principle was, that from henceforth University education is to be cut off from any additional State support; that, whatever may be the unforeseen developments of science, while other nations go on richly endowing its prosecution, not a penny more than a sum now fixed is to be voted for its encouragement in Scotland, and that the sum fixed for all University purposes in this country is to be about 1 per cent. of the present educational vote for the United Kingdom. He also considered it a serious *lapsus* in the Lord Advocate's measure that he consented to provide that no part of the additional grant from the State should be allowed to go to augment the endowment of any of the Theological chairs. Some of the problems which the Executive Commission appointed under this Bill would have to deal with were very complex and difficult, such for example as—1. How to rearrange the rules of graduation in arts and in science, so as to give a wide choice of subjects to the candidate, and to open a number of alternative avenues to a degree, and yet to preserve a perfect equality as to ease and difficulty of access, and prevent some subjects from being duly favoured and others doomed to comparative neglect. 2. How to adjust into perfect equity a fee fund, so that the interests of individual professors should no longer, as hitherto, be isolated, but should be more bound up in the corporate prosperity of the University. These were problems worthy of the strongest and wisest heads, but they could hardly be dealt with prudently unless there be in the Commission a strong infusion of actual knowledge and experience of the working of the Scottish Universities. After referring to the way in which university work was to be tested, Sir Alexander concluded by touching upon what might be the philosophical attitude of the University in the future; he saw no reason to expect that it would accept the mechanical cosmism of Darwinism in its extreme developments, or its clumsy and infelicitous attempts to evolve reason out of matter.

NEW LECTURE ROOMS AT SURGEONS' HALL.

A very great and much needed improvement has been effected at Surgeons' Hall. The dissecting-room has been enlarged to twice its former size, a bone-room has been added, while ample accommodation has been provided for the practical teaching of physiology and pathology. The chemical and other departments have also been much improved, and spacious staircases added. Dr. Macdonald Brown has succeeded Dr. Cathcart in the anatomical department of Surgeons' Hall. Dr. Cathcart has commenced to lecture on surgery at Nicholson-square.

MR. JOHN WINNALL GEORGE, M.R.C.S., public vaccinator for the Malvern and Leigh districts, Worcestershire, has received for the second time the Government grant for efficient vaccination.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

THE meeting of Convocation which was held last week fell through in consequence of a sufficient quorum not having been present. The circumstance is to be regretted, as Mr. Maguire's motion in reference to the statement that the examination papers of the University are known before to certain candidates was expected to be fully discussed. Dr. C. F. Knight also intended to move a resolution to the effect that the Senate should consider the advisability of holding the medical examinations in the months of May and November in each year, and should admit undergraduates of the University and of the late Queen's University in the faculty of medicine to two examinations in the year. The apathy and indifference shown by members of Convocation, particularly those resident in Dublin, are extremely to be regretted, and their absence at such an important meeting appears incomprehensible.

The Senate have arranged that the course for the examination for the Stewart Scholarship for proficiency in mental diseases shall include diseases of the brain and spinal cord, and diseases of the nervous system, practical examination of patients labouring under such diseases, and written reports of the same. Candidates will also be examined with the microscope on various pathological specimens and preparations illustrative of those diseases. The examination for the scholarship will occupy not less than three days.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The College of Physicians in Ireland for a considerable time past has granted its diplomas to female candidates, and it is probable that before long the Royal College of Surgeons will follow in the steps of its sister corporation. The matter was recently brought before a committee of the Council, when, on the motion of Dr. Cameron, Vice-President of the College, seconded by Dr. Kidd, the proposal to admit women to the examinations of the College, should the Council think fit, was carried on a division by nine to four. It is expected that steps will shortly be taken to have an alteration made in the Charters of the College, so that voting for Council by means of balloting papers sent by post as well as by personal attendance may come into operation.

ACADEMY OF MEDICINE IN IRELAND.

The second annual general meeting will take place this week, when the reports from the General Council and the general treasurer will be submitted, and the election of office-bearers take place. Among the notices of motion to be considered at the meeting are two of importance—viz., one by Mr. Swanzy, and the other by Dr. Duffey. Mr. Swanzy suggests that it be referred to the General Council to consider whether it be desirable that the Academy should encourage original research by grants or otherwise, and Dr. Duffey will move that no officer of the Academy shall receive any emolument from its funds. As far as finance is concerned, the Academy is flourishing, commencing, as it does, its second session with a balance in hand of £305.

PROPOSED HOSPITAL FOR CONSUMPTION, BELFAST.

Last week Mr. Forster Green, a well-known citizen of Belfast, handed to the chairman of the managing committee of the Belfast Royal Hospital a cheque for £5000, the interest of which is intended to be used for the treatment of patients suffering from consumption in a portion of the Convalescent Home on the Throne Lands. It is satisfactory to find that this sum has been supplemented by donations for the same purpose from several others, so that up to the present £887 8*s.* 1*d.* has been obtained in addition to the munificent subscription of Mr. Green.

Professor Rawdon Macnamara will deliver the inaugural address at the Meath Hospital on Monday next, Nov. 3rd.

Dr. Edmund Coates of Portumna was accidentally killed by a fall from his horse on Oct. 18th at the early age of thirty-six.

Dr. Nunan has been elected, for the sixth time in succession, chairman of the Kinsale Town Commissioners for the ensuing year.

Dr. Anterson of Magherafelt has been appointed to the Commission of the Peace for the county of Londonderry.

Dublin, Oct. 28th.

PARIS.

(From our own Correspondent.)

CHOLERA AT YPORT.

YOU will have heard of the outbreak of cholera on the 23rd Oct. at Yport, a small fishing village on the coast of Normandy, between Etretat and Tréport, the origin of which was clearly traced to the importation of the germs of the disease under the following circumstances:—On September 25th some of the crew of a French fishing boat that had come from Newfoundland, and was anchored at Cette, one of the cholera-stricken towns in the south of France, arrived at Fécamp, a small seaport town in Normandy, not far from those above-named. These men travelled by rail from Cette, and on their arrival at Fécamp, which is near to their home, they had to take a sulphur bath, and fresh clothes were issued to them before they were allowed to go any further. Unfortunately, however, their own clothes, which were supposed to have been thoroughly disinfected (having gone through the form), were given back to them. On October 4th some of the disinfected clothes were washed in the sea by a female peasant, who fell suddenly ill, and died in a few hours; the physician who attended her at once recognised the malady as being Asiatic cholera. The victim was sister-in-law to one of the sailors, who was not affected by the disease, nor, indeed, were any of the others who accompanied him from Cette. The disease spread rapidly, and in the next day or two ten persons were attacked, of whom seven died, and the other three recovered. Measures were immediately taken to prevent the spread of the disease. Six more cases, however, subsequently occurred, making in all sixteen up to yesterday, of which there were nine deaths, three cured, and four under treatment. Dr. Gibert, sanitary medical officer at Havre, who was ordered to proceed to Yport and report on the character of the epidemic, concurred with the local medical men as to the malady being Asiatic cholera, but, thanks to the energetic measures that have been taken to ensure salubrity in the dwellings and in the streets, which were in a deplorably filthy condition, the epidemic has been brought under, and appears to have no tendency to spread. Dr. Gibert, moreover, observed that the persons affected were nearly all given to intemperance. Dr. Proust, principal sanitary officer of Paris, was also sent to Yport, but his report has not yet been published.

HORSE-POX.

Dr. Blachez brought to the notice of the Academy of Medicine last week an epidemic of horse-pox which lately took place at the Hospice des Enfants-Assistés. The malady was first observed in the nursery into which none but syphilitic infants, or those suspected to be such, are received. One of the infants had an ulcer on the lower lip with enlargement of the neighbouring glands, and the ass that suckled it had a deep excoriation on the teat which was noticed two days before the ulcer in the child. The animal so infected had for fifteen days suckled another infant that had an ulcer on the tongue, which naturally gave rise to suspicions of syphilis. The epidemic went on extending, when MM. Fournier and Bouley were consulted as to the nature of the prevalent malady. M. Fournier was doubtful as to its nature, but M. Bouley, the well-known veterinarian, at once pronounced it to be horse-pox, the origin of which had to be sought for. It was noticed that another infant, who had been admitted twelve days previously, had both its arms covered with vaccine pustules which were dressed by the "infirmier," who, having his fingers thus affected, inoculated the teats of the suckling asses. Other asses were also similarly affected, which was sufficient to account for the origin of this strange epidemic among the infants.

Paris, Oct. 29th.

THE SERVICES.

Deputy Surgeon General Herbert Taylor Reade, of the Medical Staff (late Army Medical Department), who was commended in despatches for his services in the Indian Mutiny Campaign, has been appointed on the Staff of Major-General R. White, commanding the Eastern District, as Principal Medical Officer, vice Surgeon-General T. Murphy, retired.

WAR OFFICE.—Medical Staff: Surgeon-Major William Edmondson Dudley is granted retired pay, with the honorary rank of Brigade-Surgeon; Surgeon-Major Humphrey Carden Gillespie, M.D., is granted retired pay, with the honorary rank of Brigade Surgeon.

MILITIA MEDICAL DEPARTMENT.—Surgeon-Major Wavil Arundel Dene, 3rd Battalion, the Prince Albert's (Somersetshire Light Infantry), resigns his commission; also is permitted to retain his rank and to wear the prescribed uniform on his retirement.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon William Connolly, M.D., to the *Duke of Wellington*; Fleet Surgeon Gerald Molloy, to the *Dædalus*; Fleet Surgeon Edward J. Butler, B.A., M.D., to Malta Dockyard; Fleet Surgeon Mark A. Harte, to the *Achilles*; Surgeon G. A. Dreaper, Surgeon William H. O'Meara, Surgeon William W. Jacobs, Surgeon Alexander F. Harper, Surgeon Herbert W. A. Burke, Surgeon Edward R. D. Fasken, Surgeon James C. F. Whicher, Surgeon Alexander G. Andrews, Surgeon Arthur S. Nance, and Surgeon Evan St. M. Nepean to the *Duke of Wellington*, additional; Surgeon John S. Lambert, to the *Hibernia*; Surgeon Frederick J. Lilly, to the *Northumberland*; Surgeon Edward J. Morley, to the *Excellent*; Surgeon Joseph R. M'Donnelly, to the *Hercules*; Surgeon George L. Baker, to the *Lark*; Surgeon Henry Canton, to the *Royal Adelaide*; Surgeon Thomas C. Rowland, to the *Undine*.

Obituary.

MR. THOMAS CHAVASSE, F.R.C.S.

WE announced last week the decease, on the 19th ult., of Mr. Thomas Chavasse, one of the few remaining members of a school nearly extinct. Originally of French extraction, Mr. Chavasse was descended from a race of surgeons that had practised at Burford, in Oxfordshire, for many generations. His father, being qualified to practise before there was a vacancy in the family practice, settled at Walsall, where the deceased was born in May, 1800. His early education was received at the Kensington Gravelpits School, and at the age of sixteen he was apprenticed as resident pupil for five years to the General Hospital, Birmingham. At the expiration of his term of apprenticeship he became a student of St. Bartholomew's Hospital, and was a diligent follower of Mr. Abernethy, whose work and teaching made an impression on his after-life that was never effaced. Having obtained the Membership of the College of Surgeons and the Licence of the Apothecaries' Society, Mr. Chavasse returned to Birmingham in 1822, and in a few years acquired what is generally believed to have been the largest general practice ever attained in the provinces. At this he worked incessantly until 1850, when, his health failing, he retired to Leamington. In 1844 he received the Honorary Fellowship of the College of Surgeons. A rest of three years having sufficed for restoration to health, Mr. Chavasse settled at Wylde-green, and recommenced professional practice. At the same time two days in the week were devoted to consultation work in Birmingham. This course was actively followed until he had reached his eightieth year, when the infirmities of age first really became marked.

For many years Mr. Chavasse was a member of the Sutton Coldfield Corporation, and for three successive years he was warden or mayor of that Royal town. At the expiration of the term of office he was appointed "capital burgess;" but, magisterial work being distasteful to him, after occupying the position for some time, he resigned his seat on the bench. Until the last few years he also acted as one of the trustees of the Medical Benevolent Society, and ever showed great personal interest in the work of that Society. He was amongst the first who enrolled themselves as members of the Provincial Medical and Surgical Association, his name appearing in the list in the first volume of the Transactions of the Society. To the fourth volume of the Transactions he contributed a paper on "Secale Cornutum," and to our own pages one on "Uterine Hæmorrhage: the Injection of Cold Water as a Remedy."

ROYAL COLLEGE OF PHYSICIANS.

THE ordinary Comitia of the Royal College of Physicians was held on Thursday last, Oct. 30th, Sir W. Jenner, Bart., President, in the chair. A considerable amount of routine business was transacted. The President nominated Dr. R. Quain to be Harveian Orator for next year, and Dr. Mahomed as Bradshawe Lecturer.

Dr. Mahomed moved, and Dr. F. T. Roberts seconded, the following resolution:—"That a Committee be appointed to consider whether any means might be advantageously adopted byt he Government or other public body, to ascertain and certify the composition and quality of patent and manufactured medicines, of unofficinal and also officinal drugs, and of all drugs dispensed under the prescriptions of registered medical practitioners. That the Committee report to the College at an early date."

The resolution was opposed by Dr. Bristowe and Dr. W. Farre, and negatived.

MEDICAL NOTES IN PARLIAMENT.

Over-pressure in Schools.

IN the House of Commons on Tuesday, in reply to a question by Mr. S. Leighton, of which notice had been given on the previous evening, Mr. Mundella stated that immediately on receipt of Dr. Crichton Browne's report it was sent to Mr. Fitch, who, after perusal, expressed dissent from and dissatisfaction with the document. Previously to Dr. Crichton Browne's report being made public, Mr. Fitch was not requested to make any official report. In reply to a further question, Mr. Mundella stated that Mr. Fitch was a member of the committee which was employed in drafting the New Code.

The Outbreak of Cholera in Normandy.

In reply to a question by Sir W. Barttelot, Sir C. Dilke stated that information respecting the nature of the outbreak at Yport had been asked for and partially obtained. A most complete examination of ports has been made in advance for four months with a view to prevent cholera spreading to this country, and all regulations in force during the last epidemic to check the importation of disease are in force at the present time.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen passed the Second Examination in Anatomy and Physiology on Oct. 23rd:—

Betts, Robert Sidney.
Daly, Stephen Joseph.
Green, Alfred.
Hewan, John.
Lewis, Benjamin Morgan.
Norris, Herbert Murray.
Phippe, Henry Hostache.
Smith, Newman.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Oct. 23rd:—

Bell, Charles W. Josceline, L.R.C.P.Ed., Dulwich Wood Park.
Bell, George Craigie, Blackheath.
Bury, Herbert Taylor, Hampstead.
Byrne, George, L.R.C.P.L., Manchester.
Clayton, Geoffrey Sherborne, L.S.A., Hampstead.
Fisher, Henry Oldrich, Sittingbourne.
Howish, Edgar Milnes, M.D. Toronto, Toronto.
Hillistead, Herbert John, L.S.A., St. John's.
Jacomb-Hood, Charles John, L.S.A., Tunbridge Wells.
Jessop, Edward, Nottingham.
Kerby, Robert John, L.R.C.P.L., Crouch Hill.
Lloyd, Henry, L.S.A., Denbigh.
Noad, Ernest, L.R.C.P.Ed., Christ's Hospital.
Penfold, Frederick William H., Rainham.
Shaw, Hugh Grosvenor, L.R.C.P.Ed., Stratford-on-Avon.
Weakley, Alfred James, L.R.C.P.L., Leytonstone.

Admitted Members of the College on Oct. 24th:—

Averill, Charles, L.S.A., Stafford.
Best, William James, L.S.A., Queensdown-road.
Blair, Charles Samuel, M.B. Durh., Newcastle-on-Tyne.
Cusse, Ernest, L.S.A., Great Ormond-street.
Cann, Ralph Thomas, L.R.C.P. Lond., Lambeth-palace-road.
Carr, John Walter, L.S.A., Bloomsbury-square.
Gubb, Alfred Samuel, L.S.A., Southampton.
Santi, Philip Robert W., L.S.A., Doughty-street.
Tuck, Harry, L.S.A., Surbiton.
Tytheridge, Walter Robert, L.R.C.P.Ed., St. James's-square.
Williams, Reginald Muzio, L.S.A., Beaumaris.

Thirty-two candidates passed the examination in Surgery, and will be admitted Members of the College on obtaining a Medical diploma.

The following gentlemen, having passed the necessary examination, were admitted Licentiates in Dental Surgery and received their diploma at a meeting of the Board of Examiners in that subject on Oct. 29th:—

Ackland, W. Robert, Southernhay, Exeter.
Crocker, James Charles Vipond, Penzance.
Levason, Peyton Grenville, Bridge-street, Hereford.
Parkinson, Herbert Stephen, Sackville-street.
Roberts, Charles Alfred, Weymouth-street.

Three candidates were referred.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on October 24th the following degrees were conferred:—

BACHELOR OF MEDICINE.—Robert Whinery Leeming, Christ's; Arthur William Chalmers Peskett, Downing.
BACHELOR OF SURGERY.—Arthur W. Chalmers Peskett, Downing.

On the same day the following were appointed Examiners:—First Examination for M.B. Degree: Professor A. Schuster, Owens College, Manchester; Mr. W. N. Shaw, Emmanuel; Mr. A. Scott, Trinity; Mr. M. M. Pattison Muir, Gonville and Caius; Mr. F. Darwin, Trinity; Mr. H. M. Ward, Christ's; Dr. A. M. Marshall, St. John's; Mr. A. Sedgwick, Trinity. Second Examination for M.B. Degree: Professor Macalister; Mr. Alexander Hill, Downing; Professor Michael Foster; Mr. J. N. Langley, Trinity; Professor Latham.

ROYAL UNIVERSITY OF IRELAND.—The following degrees were conferred last week by his Grace the Duke of Abercorn, Chancellor of the University:—

BACHELOR IN MEDICINE.—Honours: First Class—R. J. Macnamara. Second Class—William White, John Kearney, Thomas Grainger, Joseph Daly, James Morwood,—Upper Pass Division: W. Bartley, Robert Carter, Maurice Connery, Charles Cooke, Charles Elliott, Thomas Frizell, Benjamin Hosford, Philip Macarthy, Dennis Sheahan.—Lower Pass Division: William Bailey, Patrick Blackhall, Arthur Blackwood, Frederic Burns, George Clarke, John Corbett, Patrick Cotter, Warren Crooke, James Ferguson, Joseph Guisani, Charles Graves, Edward Greene, Charles Hayden, Peter Horkan, Samuel Hunter, Hugh Lewers, Marcus London, James McEvoy, Nicholas McDonnell, Joseph McKay, Morgan McSwiney, Edward Magennis, James Magner Donald Martin, John Moore, Hugh Morrison, Cornelius O'Doherty, Michael O'Halloran, Patrick O'Hara, J. Prendergast, Frederic Sinclair, Alfred J. Smith, Patrick Soraghan, Alfred Starling, George Tate, Wm. Wadsworth, George Waters, George Nesbitt Wynne.

MASTER OF SURGERY.—William Bailey, W. Bartley, P. Blackhall, Arthur Blackwood, Robert Carter, George Clarke, Maurice Connery, Charles Cooke, John Corbett, Patrick Cotter, Warren Crooke, Joseph Daly, Charles Elliott, Jacob Fairbrother, James Ferguson, Thomas Frizell, Joseph Guisani, Thomas Grainger, Charles Graves, Edward Greene, Charles Hayden, Peter Horkan, Benjamin Hosford, James Hunter, Samuel R. Hunter, John Kearney, John Kenny, Hugh Lewers, Marcus London, James Macaulay, Matthew McAuley, James McAvoy, Philip McCarthy, Nicholas McDonnell, Joseph B. McKay, Robert Macnamara, William McWilliam, James F. Magner, W. Martin, James Morwood, James O'Connell, Cornelius O'Dogherty, Michael O'Halloran, Patrick O'Hara, Denis Sheahan, Alfred Smith, P. Soroghan, Alfred Starling, George Tate, George Waters, William White, George N. Wynne.

DIPLOMA IN OBSTETRICS.—Patrick Blackall, Arthur Blackwood, J. W. Bullen, Patrick Cotter, Charles Elliott, James C. Ferguson, Joseph Guisani, Thomas Grainger, Samuel Hamilton, Benjamin Hosford, John Kearney, Hugh Lewers, James McAvoy, Philip McCarthy, Nicholas McDonnell, James Magner, James Morwood, Cornelius O'Dogherty, Michael O'Halloran, Denis Sheahan, Alfred J. Smith, Alfred Starling, William White.

DIPLOMA IN SANITARY SCIENCE.—John Roche.

EXHIBITIONS.—First Class (£50): Robert J. Macnamara. Second Class (£25 each): *William White, John Kearney, Thomas Grainger, Joseph T. Daly.

*Disqualified by University or Collegiate standing.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 23rd:—

Best, W. Jas., Richmond House, Queenstown-road, Clapton.
Jones, J. Arnallt, Aberyswyth Vicarage, Llanwrtyd, Brecon.
Lloyd, Henry, Llahrhaiadr, Denbigh
M'Donnell, Alexander, Kingsland-road.
Tronson, W. Francis, Oxford-gardens.
Williams, Reginald Muzio, Tre Castell, Beaumaris, Anglesea.

The following medals have been awarded by the Society of Apothecaries during the past year:—Materia Medica and Therapeutical Chemistry: Gold medal, John Henry Garrett, University College; silver medal and books, Henry Hamilton, Bristol Medical School. Botany: Gold medal, Ernest H. Starling, Guy's Hospital; silver medal and books, William Beecroft Bottomley, St. Mary's Hospital. A gold medal has also been awarded to Bertha Whitehead, and a silver medal

to Sarah Elizabeth Wright.——The Society's gardens at Chelsea have been visited during the year by 3248 students, three-fifths of whom were males.

THERE appears to be a paucity of subjects for anatomical purposes in Edinburgh.

THE late Countess Bose of Cassel has bequeathed to the University of Berlin the sum of 780,000 marks (£39,000) for the benefit of poor students of medicine.

A SAILING-VESSEL, the "F. I. Merryman," has arrived in New York, the whole of the crew with the exception of two having been removed by fever during the voyage from Bathurst on the west coast of Africa.

THE offices of Medical Officer of Health and that of Public Analyst in St. Luke's parish, which have heretofore been held conjointly by Dr. Pavy, have, on his resignation, been made separate appointments.

VACCINATION PROSECUTIONS.—It appears that out of 1595 convictions for neglecting to comply with the Vaccination Act for the year ending Sept. 29th, 1883, no fewer than 422 took place in the town of Leicester. In the West Riding of York there were 140 convictions; in Halifax, 104; in Oldham 91; in Lincoln, 87; and in Derby and Nottingham, 58 each. During the year fines were imposed in 1190 cases.

THE METROPOLITAN ASYLUMS BOARD.—At the meeting of the managers of the Metropolitan Asylums Board on the 25th ult., it was announced that the Local Government Board had authorised the expenditure of £2425 in connexion with the hospital-ship *Castalia*, and the borrowing of £1630 of this amount. Relative to the question of the removal of non-pauper cases of infectious disease to the managers' hospitals, a recommendation made by the General Purposes Committee was adopted, to the effect that the Local Government Board be requested to place themselves in communication with the several local authorities of the metropolis, with the view to issuing an order which shall empower the managers (in accordance with the terms of Clause 15 of the Poor Law Act of 1879) to contract with such authorities for the reception into the managers' hospitals of cases of dangerous infectious disorders other than those chargeable to the various parishes and unions.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, London.
Dental Caries. By Henry Sewill, M.R.C.S. L.D.S.E. pp. 66.

BERMINGHAM & Co., New York and London.
The Lockjaw of Infants. By J. F. Hartigan, M.D. pp. 123.

CASSELL & Co., London.
Humphry Sandwith: a Memoir. By his Nephew, Thomas Humphry Ward. pp. 261.

CHURCHILL, J. & A., London.
Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S. Fifth Edition, Edited by John Langton, F.R.C.S. pp. 878, with Illustrations.
On Diseases of the Rectum and Anus. By Harrison Cripps, F.R.C.S. pp. 429, with 12 Plates.
Handbook of Midwifery for Midwives. By J. E. Burton, M.R.C.S., L.R.C.P.L. Second Edition. pp. 208.
A Descriptive Catalogue of the Pathological Museum of the Middlesex Hospital. By J. Kingston Fowler, M.D., and J. B. Sutton, F.R.C.S. pp. 308.

COLLINS, SONS, & Co., London and Glasgow.
Hygiene: its Principles as applied to Public Health. By E. F. Willoughby, M.B.Lond. pp. 305, with 30 Illustrations.

EGLETON, T. H. V., London.
An Intrigue at Bagnères. pp. 377.

FANNIN & Co., Dublin; BAILLIÈRE, TINDALL, & COX, London; MACLACHLAN & STEWART, Edinburgh.
Transactions of the Academy of Medicine in Ireland. Vol. II. Edited by William Thomson, M.A., F.R.C.S. pp. 504, Illustrated.

GEORGE & Co., Lansing, Michigan.
Eleventh Annual Report of the Board of Health of the State of Michigan, 1883. pp. 262.

HARRISON & SON, London.
A Statistical Chronology of Plagues and Pestilences as affecting Human Life, with an Inquiry into their Causes. By Cornelius Walford, F.I.A., F.S.S., F.R. Hist. Soc. pp. 151.

HODDER & STOUGHTON, London.
The Spitalfields Genius: the Story of Wm. Allen, F.R.S., &c. Re-told by J. Fayle, B.A. Lond. & Camb. pp. 190, with 3 Illustrations.

LEA'S SON & Co., Philadelphia; H. KIMPTON, London.
A System of Human Anatomy, including its Medical and Surgical Relations. By Harrison Allen, M.D. Sect. VI.: Organs of Sense, of Digestion, and Genito-urinary Organs.

LEBÈGUE ET CIE, Bruxelles; SAMPSON LOW & Co., London.
De la Répartition du Sang Circulant dans l'Economie. Par le Dr. Emile Spehl. pp. 230.

LEWIS, H. K., London.
A Handbook of Diseases of the Eye and their Treatment. By H. R. Swanzy, A.M., M.B., F.R.C.S.I. pp. 437, with Illustrations.
Notes on Materia Medica and Pharmacy. By Frederick J. Roberts, M.D. &c. pp. 380.
A Practical Treatise on the Medical and Surgical Uses of Electricity. By G. M. Beard, A.M., M.D., and A. D. Rockwell, A.M., M.D. Fourth Edition, Revised. pp. 758, Illustrated.

LIPPINCOTT & Co., London & Philadelphia.
Elements of Modern Chemistry. By Adolphe Wurtz. Translated and Edited by W. H. Greene, M.D. Second American Edition. pp. 770, with 132 Illustrations.
Fat and Blood: an Essay on the Treatment of certain Forms of Neurasthenia and Hysteria. By S. Weir Mitchell, M.D. Third Edition, Revised, with Additions. pp. 164.

LONGMANS, GREEN, & Co., London.
Transactions of the Clinical Society of London. Vol. XVII. pp. 256, with Illustrations.

MACMILLAN & Co., London.
The Modern Operations for Cataract. Lettsomian Lectures, 1884. By R. Brudenell Carter, F.R.C.S. pp. 83.

PUTNAM'S SONS, New York & London.
Myths in Medicine and Old-time Doctors. By Alfred C. Garratt, M.D. pp. 242, with Illustrations.

RELIGIOUS TRACT SOCIETY, London.
Mahomet and Islam. By Sir William Muir, K.C.S.I., LL.D. pp. 256, Illustrated.
Egyptian Life and History according to the Monuments. By M. E. Harkness. pp. 160, Illustrated.
The Honey Bee, its Nature, Homes, and Products. By W. H. Harris, B.A., B.Sc. pp. 272, with Illustrations.
The Girl's Own Annual. pp. 832, Illustrated.
The Sweet Story of Old. By Hesba Stretton. pp. 103, with 12 Coloured Illustrations.

SMITH, ELDER, & Co., London.
A Treatise on the Science and Practice of Midwifery. By W. S. Playfair, M.D., F.R.C.P. Fifth Edition. In 2 volumes. pp. 408–411, with Illustrations.

SWAN, SONNENSCHEIN, & Co., London.
Elementary Text-book of Zoology: Protozoa to Insecta. By Dr. C. Claus. Translated and Edited by Adam Sedgwick, M.A., with the assistance of F. G. Heathcote, B.A. pp. 615, with 706 Woodcuts.

TRÜBNER & Co., London.
B. Bradshaw's Dictionary of Mineral Waters, Health Resorts, &c. pp. 300.

Reports of the Medical, Surgical, and Pathological Registrars of the Middlesex Hospital for 1883 (Smith, Long-acre.)—Man not a Machine, but a Responsible Free Agent; by the Rev. Prebendary Row.—Seventh Annual Report of the Health Commissioner of the City of St. Louis.—On the Communicability of Cholera by Human Intercourse.—The Medicine Stamp Act; by C. R. Mestkerke. (Wyman & Sons.)—The Mouth and Teeth in Health and Disease; by J. M. Dennis, F.L.S. (Simpkin & Marshall.)—Cases of Interest; by Prof. W. H. Carmalt, M.D., New Haven.—Archivio di Ortopedia, Set. 1884.—Das Chlornaure Kali; von Dr. J. v. Mering. (Hirschwald, Berlin.)—A Consideration of the Causes of Insanity; by Walter Channing, M.D.—The Condition of Gaols, Hospitals, and other Institutions as described by John Howard; by J. B. Bailey. (Lewis.)—Transactions of the Medical and Chirurgical Faculty of the State of Maryland.—Uber Schul-hygiene in England; von Dr. Herman Weber.—Corpulence and its Treatment; by Dr. W. Ebstein. (Bergmann, Wiesbaden.)—Jahresbericht ü. d. Leistungen u. Fortschritte auf dem Gebiete des Militär-Sanitätswesens; bearbeitet von Dr. W. Roth; ix. Jahrgang.—Eyesight in Civilisation; by R. B. Carter, F.R.C.S. (Macmillan.)—Transactions of the American Otological Society, Vol. III., Part 3.—Disorders mistaken for Hydrophobia; by C. W. Dulles, M.D.—How to Live on a Shilling a Day. (Maxwell, London.)—Gynäkologischer Specialismus; von Dr. Leopold Landau.—Recherches Expérimentales sur l'Excitabilité électrique des Circonvolutions Cérébrales et sur la Période d'Excitation latente du Cerveau; par Dr. H. C. de Varigny. (Baillière, Paris.)—Cholera and Yellow Fever; by J. W. Williams.—Index Medicus, Vol. VI., No. 9.—Good Words, Sunday Magazine, Nov. (Isbister.)—Longman's Magazine, Nov.—Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, for Nov. (Religious Tract Society.)—On Branchial Cysts of the Neck; by Dr. N. Senn.—Force *v.* Work; by William Pepper, M.D. Baltimore.—Observations on China; by Fortescue Fox, M.B. Lond. (Stanford.)—Lehrbech der Physiologie; neu Herausgegeben von Dr. A. Gaenhagen; dritte Lieferung.—La Hijiene de la Escuela; por Ricardo Davila Boza.—Ueber Ptomaine; von Prof. L. Brieger. (Hirschwald, Berlin).

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ADDENBROOKE, E. H., M.R.C.S., L.S.A.Lond., has been appointed Certifying Surgeon, under the Factory Act, for the District of Kidderminster, vice Wm. Roden, M.D., deceased.

ARMITAGE, E. H., M.R.C.S., L.R.C.P.Lond., has been appointed Resident Medical Officer to the Hulme Dispensary, vice J. B. Dreaper, M.R.C.S., resigned.

BARBOUR, J. M., M.B., has been elected Honorary Surgeon to the Royal Alfred Sailors' Home, Bombay, vice Cassum, deceased.

BURRY, HENRY B. PULLEN, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Midland District of the Midhurst Union, vice Pearse, whose term of office has expired.

BUSH, JAMES PAUL, M.R.C.S., L.S.A.Lond., has been appointed Surgeon to the Bristol Police Force, vice Cross, resigned.

CHAMBERS, H. W., L.R.C.P., M.R.C.S., has been appointed Senior Assistant House-Surgeon to the Hull General Infirmary, vice Jackson, resigned.

DAVIES, J. T., L.R.C.P.Ed., M.R.C.S., has been appointed House-Surgeon to the Denbighshire Infirmary, vice Lloyd, resigned.

DREAPER, J. B., M.R.C.S., has been appointed Honorary Surgeon to the Hulme Dispensary, vice A. J. Neale, M.B., C.M.Ed., resigned.

ELPHINSTONE, ROBERT, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Silverstone District of the Towcester Union, vice Weir, deceased.

FULLER, ARTHUR, M.B., C.M.Ed., M.R.C.S., has been appointed Assistant Medical Officer to the Hackney Union Infirmary, vice Dr. Gordon, promoted.

HARRIS, THOS., M.D.Lond., M.R.C.S., has been appointed House-Physician to the Radcliffe Infirmary, Oxford.

HARVEY, WILLIAM, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Maytown Hospital, Queensland.

HOZIER, C. H. SMITH, F.R.C.S., L.K.Q.C.P.I., has been appointed Government Medical Officer and Vaccinator for the District of Gundagai, New South Wales; also Surgeon to the Hospital.

PASH, WILSON, M.A. & M.B.Cantab., of Laurie-park, Sydenham, has been appointed House-Physician to the London Hospital.

THOMSON, JOHN, M.D., Ch.M.Aber., has been appointed Government Medical Officer and Public Vaccinator for the District of Silverton, New South Wales.

WADE, CHARLES, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Hatfield District of the Dunmow Union, vice Firman, resigned.

WILSON, G. J., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Radcliffe Infirmary, Oxford.

WILSON, JAMES SCOTT, M.B., C.M.Glas., has been appointed Medical Officer for the Borough District of the Walsall Union, vice Hubbard, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BARLOW.—On the 23rd ult., at Montague-street, Russell-square, the wife of Thomas Barlow, M.D., F.R.C.P., of a son.

BURRY.—On the 18th ult., at Liphook, Hants, the wife of H. B. Pullen Burry, L.R.C.P., M.R.C.S., &c., of a son.

CARR.—On the 20th ult., at Long-street, Devizes, Wilts, the wife of Alfred Carr, M.R.C.S., of a son.

FENNELL.—On the 24th ult., at Knutsford, Cheshire, the wife of Theodore Fennell, M.R.C.S.E., L.S.A.Lond., of a daughter.

LANCASTER.—On the 21st ult., at Neston Lodge, Lewisham High-road, S.E., the wife of Henry F. Lancaster, M.D., of a son.

WISE.—On the 23rd ult., at Walthamstow, the wife of C. H. Wise, M.D., of a daughter.

MARRIAGES.

ATKINS—HUNT.—On the 25th ult., at Kilrosanty Church, Ringrone Atkins, M.A., M.D., Resident Medical Superintendent, District Lunatic Asylum, Waterford, to Mary Ellen, second daughter of the late Thomas Hunt, Esq., of Rockmount, co. Waterford.

HODGES—VIDLER.—On the 22nd ult., at St. Nicholas' Church, Remenham, James Hodges, M.R.C.S., L.S.A.Lond., of Bury St. Edmunds, eldest son of the late Rev. James Hodges, of Shippon, Berks, and of St. Helier's, Jersey, to Alice Maria, youngest daughter of William Vidler, of Remenham, Berks.

HUMPHREYS—HARRATT.—On the 22nd ult., at the Parish Church, Wallington, Surrey, John Henry Humphreys, M.D.Lond., youngest son of the late Charles Humphreys, Esq., of Oswestry, Salop, to Helena Joaquina, eldest daughter of the late Charles Harratt, Esq., of Liverpool and Buenos Ayres.

DEATHS.

BROWN.—On the 22nd ult., after a short illness, Charles Blakely Brown, M.D.Oxon., of Hill-street, Berkeley-square, W.

GIBSON.—On the 19th ult., at Prospect-street, Hull, Henry Gibson, M.R.C.S., aged 71.

LUKE.—On the 22nd ult., at the residence of his sister, Beulah-villas, Clive-vale, Hastings, Joseph Luke, M.D., of Oak Lodge, Green-lanes, Finsbury-park, N., aged 66.

SHEEHY.—On the 24th ult., at his residence, Great Percy-street, W.C., William Henry Sheehy, L.R.C.P.Edin., late of Claremont-square, in his 65th year.

ST. CLAIR.—On the 21st ult., at Cain House, Wigtown, Scotland (formerly of Blackpool), James Aitken St. Clair, B.M., C.M., in his 38th year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stenart's Instruments.)

THE LANCET OFFICE, October 30th, 1884.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Oct. 24	29·94	..	47	46	..	55	43	..	Foggy
,, 25	30·12	..	39	39	..	50	37	..	Foggy
,, 26	29·60	..	45	43	..	57	39	..	Cloudy
,, 27	29·87	..	45	41	..	52	41	·02	Cloudy
,, 28	29·53	..	60	56	..	63	44	..	Cloudy
,, 29	30·09	..	41	39	..	53	36	·15	Foggy
,, 30	30·26	..	47	45	..	56	39	..	Foggy

Medical Diary for the ensuing Week.

Monday, November 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Casual Communications by Messrs. Ackery, A. S. Underwood, Storer Bennett, and Morton Smale.—Mr. F. Newland Pedley: Some Points in connection with Fracture of the Lower Maxilla.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. General meeting.—Mr. Edmund Owen: Lancing the Gums.—Dr. de Havilland Hall: A Case of Surgical Scarlet Fever.

Tuesday, November 4.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 P.M., and Thursdays at 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Hale White: Coarctation of the Aorta.—Drs. Hobson and Lanchester: Caseous Pneumonia simulating Empyema.—Mr. Barker: Removal of Upper Jaw for Epithelioma.—Dr. Percy Kidd: Cardiac Aneurysms.—Dr. Howard Tooth: Lympho-sarcoma of the Liver in a Child.—Dr. Carrington: Cancer of the Liver and Adrenals, with Melanæmia, &c.—Dr. Acland: Two Cases of Ulceration of the Intestines in Paraplegia.

Wednesday, November 5.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.—Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations 2½ P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—8.30 P.M. Council Meeting.—4 P.M. Dr. A. H. Newth: The Value of Electricity in the Treatment of Insanity.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Mr. Lawson Tait and others.—Dr. Grailly Hewitt: The Severe, or so-called "Uncontrollable," Vomiting of Pregnancy.—Dr. Potter: Retained product of Conception.

Thursday, November 6.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

HARVEIAN SOCIETY.—8.30 P.M. Dr. Stephen Mackenzie: Two Cases of Lichen Planus of Nervous Distribution.—Mr. J. H. Morgan: Cases of Painful Mamma in Young Girls.—Dr. Amand Routh: Cases of Retroversion of the Gravid Uterus.—Mr. R. F. Benham will exhibit a New Antiseptic Vaporiser and Improvements in Syringes.

Friday, November 7.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Barnard Pitts: Foreign Body in the Air-passage; Abscess of the Lung; recovery.—Mr. Maitland Thompson: Case of Retention (twenty-four hours); Catheter Fever; death.—Mr. Noble Smith: The Objects of the Medical Sickness Annuity and Life Assurance Society.—Dr. Chas. Good: Gastric Ulcer Rupture; sudden death.

Saturday, November 8.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

IN MEMORIAM.—SAMUEL RABBETH.

S ad is each heart, and dimmed with tears each sight.
A nother from our midst has passed away,
M anhood scarce reached! And yet before him lay
U nrolled a future, glorious and bright.
E ver his duty to perform aright
L ived he and died. What more of man to say?

R ead, all, a lesson in his life now past;
A nd in his death read we no lesson too?
B right as our sky of life is now to view,
B lack with death's clouds soon it may be o'ercast.
E ach day we live may be, like his, the last.
T hen let this thought be ever with each one:
H ere for to-day—perchance to-morrow gone.

King's College Hospital, Oct. 29th, 1884.

Enquirer.—The certificate testifies to the efficiency of the holder to compound and dispense medicines.

Mr. Nixon.—A short notice of the portable hospital was given in our last issue.

DISINFECTION.

To the Editor of THE LANCET.

SIR,—Will you kindly give me, through the medium of THE LANCET, the benefit of your opinion on the following question of practical disinfection? Is it safe, after thorough fumigation by sulphur, to allow the paperhangings to remain on the walls of bedrooms which have been occupied by cases of (1) measles and (2) enteric fever? I require its removal after cases of small-pox, scarlet fever, and diphtheria, and have generally found no difficulty in getting it done; but there is a decided opposition, even among the "better classes," to removing it after measles and enteric fever, on the ground that it is not necessary, and this idea is often shared by the medical attendant. As medical officer of health for a popupar health-resort, I should feel obliged by the support of your opinion.

I am, Sir, yours faithfully,

Oct. 15th, 1884. M. O. H.

*** Much depends on the efficacy of the fumigation. Assuming this to be efficient, it is a good rule to suggest removal of wall-paper and white liming of ceilings in all cases of infectious fever; but as regards enteric fever, it would be difficult to bring forward proof of its necessity. It is rather the mystery that attaches to certain recurrences of typhoid fever that makes it desirable to recommend it. The recommendation once made, it would probably be unwise to attempt to enforce it. In the case of measles, the need for stripping the walls is much greater; but the poison of measles, although very intense while it lasts, is probably one of the easiest to get rid of by proper disinfection, cleansing, and ventilation of apartments; and the after-history of attacks shows that success has attended these measures alone. The process of stripping, &c., should, however, always be recommended, and the responsibility of refusal should be thrown upon those who neglect the advice, or who advise to the contrary.—ED. L.

Subscriber.—1. Yes, so long as it does not interfere with the efficient discharge of their duties.—2. We cannot think that the practice of which our correspondent complains prevails to any extent.

Mr. J. Poland.—Yes.

QUERY.

To the Editor of THE LANCET.

SIR,—In proceeding to the Gold Coast as colonial surgeon for three years or longer, could any of your readers give me an idea of the nature, material, and amount of outfit I shall require, and what books of reference would be a *sine qua non*. I should value also some hints as to the climate, customs, &c.

I am, Sir, yours truly,

Oct. 22nd, 1884. M.D.

THE VALUE OF SEWAGE.

AN intelligent correspondent has misunderstood our recent remarks in regard to the value of town sewage, and it is therefore probable that others have done the same. It is well known that at the present time it is impossible to make any profit, or, indeed, to avoid a great loss, in the disposal of town sewage under the water-carriage system. The ammonia of the sewage is by far the most valuable of its constituents, and would be worth millions a year if it could be recovered. But no method for this recovery is known, and the other constituents of sewage are so much diluted with water at all times, and so enormously diluted during wet weather, that sewage must remain, for the present, a source of loss, instead of gain, to the community. But none the less is it the duty of every country and of every age to save as much as possible of the constituents of food from the all-devouring sea. Now, every precipitation process for the disposal of sewage preserves for ultimate food supply some portion, at any rate, of the phosphates so essential to animal life, and so sparingly distributed on the earth's crust. Fishes, indeed, restore to the earth some portion of the phosphates wrenched from it by the sea; but there is a miserable disproportion between the gains and the losses. As regards phosphates, the balance of trade, so to speak, is entirely against the earth.

EMIGRATION OF LEUCOCYTES THROUGH THE WALLS OF CAPILLARIES.

To the Editor of THE LANCET.

SIR,—Though still only a student, I have regularly for some time read THE LANCET with great interest. Since reading the number for October 11th I have been much exercised in my mind by an article written by Mr. T. Wharton Jones. He there takes away from us students our old ground of belief in the extravasation of leucocytes in inflammation, and gives us nothing in its place. May I through your columns ask him in what way he explains the presence in an inflamed area of the very numerous cells which in all essential particulars exactly resemble leucocytes? In Ziegler's Pathology I am constantly meeting with such phrases as "the infiltrated area" (referring to inflammation), "the extravasated cells," &c. In what way are we to translate such sentences in the face of Mr. Jones's "Remonstrance?"

I am, Sir, yours truly,

London Hospital, Oct. 20th, 1884. F. J. SMITH, B.A.

*** We forwarded a copy of the above letter to Mr. Wharton Jones and have received from that gentleman the following reply:—

I am pleased beyond measure with Mr. F. J. Smith's inquiry, and fully sympathise with him in his perplexity. Mr. Smith's communication suggests to me that besides my remonstrance to authors, professors, and occasional orators against teaching that white blood-corpuscles escape from small vessels by boring through their walls without leaving any breach, I ought to have addressed one also to students, not to believe what their manuals and professors tell them on the subject until they have had demonstrated to them as a fact in nature what is merely asserted. Mr. Smith will remember that I am myself an inquirer merely, as well as an investigator; but in my experimental researches I have always been careful to suspend my belief in such matters until I could observe the facts; for seeing is believing. There are leucocytes and leucocytes; but, though resembling each other in external appearance, it does not follow that they have all emigrated from the blood. Surely, it could not be said that a crowd of people in the street must have issued from the houses, unless we saw them in the act. The white cells in the mesentery of the frog, which I refer to in my article as having been shown to me as white blood-corpuscles which had escaped from capillaries and venous radicles, were not white blood-corpuscles at all, and could not have escaped from non-existent vessels. If Ziegler (Pathology) did not see the cells actually boring themselves out through the walls of vessels, he has no right to say that he did. Extravasated blood-cells are not cells which have bored through the walls of vessels without leaving any breach. As a fact in nature, I refer Mr. Smith to the passage in my essay in the Guy's Hospital Reports for October, 1850, p. 61, quoted in my article. Professor Virchow's proliferation of cells is a fact in nature if we admit, as I contend we should do, that a condition for proliferation is a supply of lymph exuded from the blood by osmose, there being congestion in or adjacent to the part where the proliferation takes place. I shall always be happy to answer the inquiries of any perplexed student so far as my impaired strength may enable me to do so. Might I, in conclusion, suggest to the students of the different medical schools in London and elsewhere to require being shown as a fact in nature what their professors assert merely. A single glance at a crucial fact will teach a student more than all the talk of a lecture or the meaningless statements in a compiled book.

T. WHARTON JONES.

ARTIFICIAL ARMS.

To the Editor of THE LANCET.

SIR,—If "Enquirer" will communicate with me, I will be pleased to give him some useful information of the new "Beaufort" arms, which will, I am sure, prove useful to his patient. I can give him details of several similar cases in which they have been used with success.

I am, Sir, yours truly,

JAMES THOMPSON, M.D.

1, Matheson-road, West Kensington, Oct. 28th, 1884.

Dr. G. de C. Morris.—1. The view that cholera is merely an aggravated form of ague has a few supporters.—2. Neither the Privy Council nor the Local Government Board has adopted the pamphlet referred to.—3. The Local Government Board makes no recommendation as to treatment.

Mr. W. Outhwaite.—We are not aware that Fellows of the Royal College of Surgeons do enjoy any special privilege or immunity in the respect mentioned—not even in barbers' shops.

EXAMINATIONS FOR OFFICERS OF THE MEDICAL STAFF.

To the Editor of THE LANCET.

SIR,—I wish I could say the revised scheme for examining medical officers of the army is free from blots and errors; but a careful perusal of it will show many weak points, which, with your permission, and in the interests of those concerned, I shall proceed to point out, in the hope that steps may be taken to remedy the defects.

First, in the examination for surgeons it is laid down that the candidate will be required to answer on "Medicine and Pathology, including modes of prescribing and administering remedial measures, food, drink, &c." Now, surely this is hardly necessary. These officers possess double qualifications, and, moreover, passed into the service through a severe competitive examination. They must have passed at least five years in the army, and to suppose it necessary to examine them in such elementary subjects seems a mere waste of time and trouble.

The next, and probably one of the most important mistakes in the circular, is that which requires a surgeon to present a certificate of operative surgery from "a recognised teacher of surgery in any medical school at home or abroad in which operative surgery is taught," and this certificate must be taken out "during the period within which the examination must be taken"—i.e., between the fifth and tenth years of service. It will be observed that this rule is absolutely imperative. No relaxation whatever is hinted at. I would ask, How is a surgeon of, say, seven or eight years' service, who may now be ordered to the Cape, China, Malta, Gibraltar, West Indies, &c., where there are no medical schools, to comply with this regulation? Clearly, either the rule must be relaxed, or the surgeon will, through no fault of his, be deprived of his promotion.

The next point I would notice is, that while the possession of the Fellowship of a College of Surgeons or Physicians exempts a surgeon from the examination in medicine and surgery, the degree of M.D. of a university, or M.Ch., confers no such immunity; and this is the more remarkable as the latter degrees are only conferred after examination, while the Fellowship of the College of Physicians is given by election. Again, the possession of a degree or diploma in hygiene from a university exempts the surgeon from that portion of the examination; but if he obtains this diploma from the College of Physicians it is not recognised. These are blunders of the most obvious kind, and call for immediate rectification.

In the revised circular—what I may call the second edition—the final clause lays down that an officer promoted for distinguished professional service will not be called on to pass any further examination. The result of this will be that a surgeon of, say, eight or ten years' service, and who may be fortunate enough to be promoted for, say, cutting a bullet out of a general's leg, is at once declared qualified for promotion to the rank of Surgeon-General without any further test or examination. I think I have said enough to point out, without any desire whatever to cavil at the authorities, that this circular has indeed been "crude in conception," though, as it is the second edition, we cannot say it "has been promulgated in haste." There is an old saying to the effect that "the third time is the charm"; and I hope the united talent of Whitehall-yard may be able, with the assistance of these humble remarks, to produce a third edition that will, at all events, be practicable and free from errors.

I am, Sir, yours faithfully,

CENSOR.

*** We have omitted parts of "Censor's" letter, as they, for the most part, refer to points in the examinations which have been modified in the revised regulations.—ED. L.

Dr. J. H. Warren (Boston, Mass.).—We regret we are unable to assist our correspondent. We cannot extend our exchange list.

M.—Training College, 11, Fitzroy-square, W.

"TRUSS FOR OBLIQUE INGUINAL HERNIA."

To the Editor of THE LANCET.

SIR,—In answer to "General Practitioner," on the subject of the best form of truss for oblique inguinal hernia, he will, I think, find that one with a spring making the complete circuit of the pelvis is always the best. The shape of the head, or, rather, the prominence of the padding of the head, must vary with the case, simple cases merely requiring a flat head, while more severe ones require a more prominent one. The use of the understrap is to prevent the head slipping up from its position over the external abdominal ring; but if the spring is sloped sufficiently down along Poupart's ligament, there ought to be no need for an understrap, except perhaps in the case of very thin subjects. In a few cases a "long head," in which the padding is continuous into an understrap, is absolutely needed; but such cases are rare. If "General Practitioner" would wish any other information, I will with pleasure render it.

I am, Sir, yours faithfully,

Oct. 27th, 1884. HEATHER BIGG, L.R.C.P., L.R.C.S.

MEDICAL ETHICS.

A CORRESPONDENCE between Dr. Charles White of Snodlands and Dr. Pope of Town Malling has been referred to us by Dr. White for our opinion thereon. Dr. White had been called to an accident at Snodlands, the injured persons being patients of Dr. Pope. This was not very explicitly stated to Dr. White, who regarded them as visitors and continued his attendance. On hearing this Dr. Pope felt aggrieved, and wrote a letter. What a pity it is that medical men, when they think themselves ill-treated by a medical brother, should so often write! *Litera scripta manet.* The chances are ten to one that some expression will escape the best man who feels himself injured, which, uttered in conversation, would be comparatively harmless and soon forgotten, but which in writing stays, and revives, and stings, and has to be vindicated, and gathers force in every fresh letter. This is the case here. Dr. Pope had really a right to complain. Enough, we think, was said to Dr. White at first to have led him to at least suspect that the patients were patients of Dr. Pope; but we cannot approve the style of his letters to Dr. White.

Z.—The revised circular obviates some of the objections raised in our correspondent's letter; and we therefore do not think it necessary to publish it.

CLEARING TRACHEOTOMY TUBES.

To the Editor of THE LANCET.

SIR,—The lamentable death of Dr. Rabbeth, and other unfortunate occurrences still fresh in the public mind, suggest the query, Is there no means of obviating such disasters? and induce me to claim attention to a very simple contrivance for clearing the tracheotomy tube. The apparatus comprises (*a*) an ordinary kitchen bellows in good condition, and (*b*) a flexible rubber tube of three-eighths of an inch in diameter, and convenient length (say four feet), one end having a vulcanite nozzle which will accurately fit the silver tube, and with a lumen sufficient to permit the free escape of mucus, &c., and the other end having a contracted lip, so as to be air-tight when slipped over the bellows nozzle. The valve of the bellows can easily be fastened down, by screwing into it a small gimlet and tying the latter securely to the lower handle. Explanation of the *modus operandi* is needless.

I am, Sir, yours obediently,

Oct. 23th, 1884. W. L. MORGAN.

To the Editor of THE LANCET.

SIR,—Reading last week the account of the deplorable death of one of our profession, and referring to the cleansing of the cannula from the obstruction of clot or mucus during the operation of tracheotomy, suction being what is required, I suggest, instead of applying the lips, let us have a syringe, the point of metal, the cylinder of glass, that we may see what enters the moment obstruction takes place. Fix the syringe instantly to the end of the tube, either by screw or slot, pull up the piston in the usual way; a vacuum is formed, and the obstruction at once drawn into the cylinder of the syringe.

We have so many clever instrument-makers that I have no doubt the instrument could be made effectively; and I should be glad to correspond with anyone for the carrying out of so desirable an object. In the large hospitals, where, I am told, the operation is often done, one of the surgeons might easily take the matter up and test it.

I am, Sir, yours truly,

Oct. 27th, 1884. W. HUTCHISON.

Mr. Richard Kershaw will see, from a letter in our present number, that the subject is already being taken up by the profession.

Mr. A. Fuller.—No.

A CIRCULAR.

To the Editor of THE LANCET.

SIR,—May I call your attention to this circular; and will you oblige by telling me what is the "usual honorarium" (Dr. Belcher's own phrase) for recommending invalids to the charge of a medical man? Is this a generally recognised transaction? and, if so, why is such a circular sent to

Yours faithfully,

Oct. 28th, 1884. F.R.C.P.

"Belgrave House, Berkhampstead, Herts, Oct. 24th, 1884.

"Dear Sir,—May I ask the favour of your recommendation, should you know of an invalid or anyone requiring a temporary or permanent home in the house of a married medical man. I am in practice at the above address, one hour by rail from London; locality healthy and picturesque. I should esteem your introduction a kindness. Ladies, gentlemen, or children received. Terms moderate. The usual honorarium.—I am, dear Sir, yours faithfully, J. S. BELCHER, M.D."

*** We have received from correspondents several copies of the same circular, and await Dr. Belcher's explanation.—ED. L.

KYESTINE IN EXTRA-UTERINE PREGNANCY.

To the Editor of THE LANCET.

SIR,—I would be glad if any of your correspondents could inform me about any observations on the presence or absence of kyestine in extra-uterine pregnancy. Parry and other most careful observers omit all notice of the symptoms. Doubtful as may be its bearing on the diagnosis of ordinary pregnancy, it would surely be of some use here.

I am, Sir, yours truly,

King-street, Manchester, Oct. 21st, 1884. J. THORBURN.

T. G. L.—The Secretary of the Brussels Medical Graduates' Association, Dr. Pocock, The Limes, St. Mark's-road, North Kensington, will no doubt give the information.

M.R.C.S.—See THE LANCET of Feb. 16th, 1878, and Sept. 3rd and 17th, 1881, for information on nervous affections of the hand.

M.D.—Most unsafe.

SANITARY ARRANGEMENTS AT CAMBRIDGE.

To the Editor of THE LANCET.

SIR,—As an undergraduate of Cambridge living in lodgings I have suffered considerably both from defective drainage and overcrowding. The rooms I first occupied on coming up are situated in a long street at the station end of the town, the houses (chiefly one storeyed) being generally inhabited by two undergraduates. The closet is in a small back yard, and is about four feet square, without any water-supply whatever. It is built on to, and forms a part of, the back kitchen, where the cooking is chiefly done. By the side of the closet is the coal cellar, about the same size, and next the pantry, which is about three feet three inches square. The pantry has one tiny opening, covered with perforated zinc, immediately underneath which, in the yard, is an open drain, down which all sorts of liquid matter are poured. I presume the noxious gases from this drain and from the closet adjoining must affect the food, which frequently was most unpalatable. The house contains three bedrooms proper, and during part of the time I resided there seven people slept in it. The two undergraduates each occupied their own rooms; the father and two sons, aged about seventeen and thirteen, occupied the remaining bedroom, whilst the mother and her daughter, aged eighteen, slept in the room in which the family lived. Need I say that when the house was shut up at night, and six of the seven had gone to rest, the odour was at times almost unbearable. In the house from which I am now writing the watercloset has no water-supply. The apparatus has been broken for many months past, and as the landlord declines to spend any money at all on the house there does not seem much prospect of matters improving. My experience of sanitary arrangements at Cambridge is unfortunate, to say the least; but it is not, unhappily, a solitary one. The arrangements at most of the houses in the street already referred to are similar. Numbers of the undergraduates complain and suffer, but nothing is done. I dare not enter into the subject of the river; it is beyond me. Barnwell Pool must be seen and smelt in order to be properly appreciated.

I am, Sir, yours faithfully,

Union Society, Cambridge, Oct. 14th, 1884. AN UNDERGRADUATE.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir W. Gull, London; Col. Chesney; Dr. Ewart, London; Dr. W. H. Morrison, Holmesbury; Mr. Outhwaite, London; Dr. McKeown, Manchester; Mr. C. Percival; Deputy Inspector-General Winchester; Mr. R. F. Benham, London; Mr. Heather Bigg, London; Messrs. Hildesheimer and Faulkner, London; Dr. Fenwick, London; Prof. Wharton Jones Ventnor; Dr. Pelletan, Paris; Dr. Greenwood, London; Mr. A. G. Francis, London; Mr. F. Treves, London; Messrs. Nevill, London; Dr. Clark Bell, New York; Dr. Ward Cousins, Southsea; Mr. Nixon, London; Mr. A. Braxton Hicks, London; Mr. W. L. Morgan, St. Leonards; Mr. C. H. Willey, Sheffield; Messrs. Squire and Sons, London; Messrs. J. Allen and Son, London; Mr. Chauncy Puzey, Liverpool; Mrs. K. E. Cameron; Dr. Schnitzler, Vienna; Mr. Crouch, London; Dr. J. H. Warren, Boston, U.S.A.; Mr. Cassan, Gainsborough; Mr. Barwell, London; Mr. Sydney Jones, London; Mr. J. Poland, London; Mr. J. H. Morgan, London; Dr. Milner Fothergill, London; Mr. Henry Lee, London; Dr. Malins, Birmingham; Mr. R. Kershaw, Southgate; Mr. Gerrard, London; Dr. Maclaren, Edinburgh; Mr. S. Ray, London; Dr. Herman, London; Dr. Kingston Fowler, London; Mr. W. H. Axford, Southsea; Dr. Strahan, Berry Wood; Dr. Lees, London; Surgeon-Major Knox, Bareilly; Mr. J. Startin, London; Mr. Lauder, Manchester; Dr. P. W. MacDonald, Dorset; Dr. Bevan Lewis; Dr. Granville Bantock, London; Dr. S. Snell, Sheffield; Mr. J. M. Walker, Birmingham; Messrs. Jeffrey and Co., London; Messrs. J. and E. Stone, Kidderminster; Mr. R. Harrison, Liverpool; Mr. A. W. M. Robson, Leeds; Dr. Howden, Montrose, Mr. W. T. Blakeney, Brisbane; Dr. Beaney, Melbourne; Mr. Davidge, London; Dr. Collum, London; Messrs. Woolley and Sons, Manchester; Dr. Savage, London; Dr. Longley, London; Mr. Haywood, Manchester; Mr. W. Squire; Mr. Jordon, Newcastle-on-Tyne; Mrs. Rahn, Ipswich; Mr. P. Ness, London; Mr. Treneery, Bristol; Mr. Cornish, Manchester; Messrs. Bowes and Co., Dinapore; Mr. Gillespie; Mr. Maytherne, Biggleswade; Mr. Dunne, Cradley Heath; Mr. Sowter; Dr. Mason, Sheffield; Mr. Whitton, Towcester; Mr. Morton; Mr. Stilliard, Birmingham; Messrs. Read and Co., Bristol; Messrs. Wood and Co., New York; Dr. Bower, Bedford; Mr. Skrimshire, Blaenavon; Messrs. Maclehose and Son, Glasgow; Mr. Scott, Berwick-on-Tweed; Dr. Crowdy, Luddenfuts; Mr. Peacock; Messrs. Macmillan and Co., Cambridge; Mr. Smith, London; Messrs. Merton and Co., London; Messrs. Wright, Layman, and Co., London; Messrs. Ordish and Co.; Mr. Hamel, Teignmouth; Mr. Browne, London; Mr. Juler, London; Miss Hart, Dartford; Messrs. Woollams and Co., London; Mr. Ross, Stornaway; Mr. Lisle, Nantwich; Mr. J. Lucas, London; Dr. James Thompson, London; Dr. MacMunn, London; Mr. Merkay, Reading; Dr. Bond, Gloucester; Dr. Hassall, San Remo; Mr. R. Dennis, London.

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Alnwick and County Gazette, York Herald, Pioneer, Liverpool Mercury, South London Observer, Hereford Times, Cape Times, Temperance Record, Old Jonathan, Belfast Evening Telegraph, &c., have been received.

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